

**REPORT**  
**OF THE**  
**COMMISSIONER OF AGRICULTURE**

**OF THE**  
**STATE OF FLORIDA,**

**FOR THE PERIOD**

**Beginning Jan. 1, 1891, and Ending Dec. 31, 1892.**

---

**TALLAHASSEE, FLA.**  
**JOHN G. COLLINS, STATE PRINTER.**  
**1892.**

*Compliments of*  
*N. L. Mitchell*  
*Gov*

630.6  
F636  
1891

REPORT

OF THE

COMMISSIONER OF AGRICULTURE

OF THE

STATE OF FLORIDA,

FOR THE PERIOD

Beginning Jan. 1, 1891, and Ending Dec. 31, 1892.

---

TALLAHASSEE, FLA.  
JOHN G. COLLINS, STATE PRINTER.  
1893.

# REPORT

## OF THE

### Commissioner of Agriculture.

---

TALLAHASSEE, FLA., January 1, 1893.

To His Excellency, FRANCIS P. FLEMING,  
Governor of the State of Florida :

SIR—I have the honor to submit my report as Commissioner  
of Agriculture for the years of 1891 and 1892 :

#### LANDS.

##### Report of Salesman of State Lands.

##### SWAMP LANDS.

Since the first day of January, 1891, the following patents  
for swamp lands have been received from the United States,  
to-wit :

Patent No. 53—Gainesville District.....	40.00
“ 54 “ .....	22,400.00
“ 55 “ .....	15,635.14
“ 56 “ .....	39.98
“ 57 “ .....	21,983.98
“ 58 “ .....	15,782.00
“ 59 “ .....	160.00
“ 60 “ .....	40.00
“ 61 “ .....	40.00
“ 62 “ .....	16,813.55
“ 63 “ .....	17,748.46
“ 64 “ .....	2,160.38
“ 65 “ .....	320.00
“ 66 “ .....	112.00
“ 67 “ .....	80.00
“ 68 “ .....	131.54
“ 69 “ .....	80.00
“ 70 “ .....	18,022.25
“ 71 “ .....	1,050.80
“ 72 “ .....	1,501.39
“ 73 “ .....	5,547.93
“ 74 “ .....	1,359.20
“ 75 “ .....	4,449.65
“ 76 “ .....	11,961.21
“ 77 “ .....	344.88

Patent No 78—Gainesville District .....	39.63
“ 79 “ .....	19,871.40
“ 80 “ .....	846.33
“ 81 “ .....	120.01
“ 82 “ .....	1,361.32
“ 83 “ .....	1,075.75
“ 84 “ .....	120.00
“ 85 “ .....	13,424.21
“ 86 “ .....	236.59
“ 87 “ .....	10,209.74
“ 88 “ .....	39.00
“ 89 “ .....	370.00
“ 90 “ .....	1,126.34
“ 91 “ .....	171,282.23
“ 92 “ .....	120.00
“ 93 “ .....	789.82
“ 23—Former Newnansville, now Gainesville District .....	3,470.45
Total .....	882,306.66
Quantity previously patented, as shown by report of Commissioner of January 1, 1891 .....	16,191,672.52
Making total patents received .....	16,573,979.18
The quantity disposed of prior to January 1, 1891, as shown by last report of Commissioner .....	14,791,927.40
The quantity twice, or erroneously patented to the State to date .....	31,218.26
Amount sold in 1891 .....	132,061.75
Amount sold in 1892 .....	24,469.25
Amount entered by S. I. Walles on his account as State Agent in 1891 and 1892 .....	22,547.77
Amount entered by John A. Henderson on his account as State Selecting Agent in 1891 and 1892 .....	11,490.06
Amount conveyed to Railroads and Canals in 1891 .....	2,041.37
Amount conveyed to Railroads and Canals in 1892 .....	234,588.67
Amount conveyed to S. A. Swann, as assignee of E. N. Dickenson in 1892 .....	4,039.55
Amount conveyed to S. A. Swann, as Trustee of Florida Railroad Company in 1892 .....	11,443.50
Making total disposed of in the years 1891 and 1892 .....	442,681.92
Total disposed of up to January 1, 1893 .....	15,265,827.58
Leaving balance on hand January 1, 1893 .....	1,308,151.60



## LIST OF SWAMP LANDS SOLD IN 1891 AND 1892.

No. Entry	Acres.	Price.	No. Entry.	Acres	Price.
14,341	76.50	\$76 50	14,422	45.00	\$45 00
14,344	74.00	74 00	14,427	39.88	39 88
14,347	83.43	83 43	14,428	40.19	40 19
14,351	39.95	79 90	14,431	79.97	79 97
*14,354	80.37	80 37	14,432	16.56	16 56
14,355	40.02	40 02	14,435	79.97	79 97
14,363	78.15	117 23	14,436	79.97	79 97
14,366	39.93	39 93	14,437	81.95	81 95
14,367	40.07	40 07	14,439	28.00	28 00
14,368	80.00	80 00	14,443	80.00	80 00
14,373	39.93	39 93	14,444	86.28	86 28
14,375	33.60	33 60	14,446	80.01	80 01
14,376	61.00	60 00	14,448	479.25	479 25
14,378	40.00	40 00	14,449	231.65	231 65
14,382	84.40	84 40	14,450	39.99	39 99
14,387	34.57	34 57	14,451	39.94	39 94
14,389	80.00	80 00	14,453	80.01	80 01
14,391	80.05	80 05	14,455	79.94	79 94
14,392	39.85	39 85	14,458	40.19	40 19
14,394	37.50	37 50	14,459	39.96	39 96
14,395	34.20	34 20	14,460	40.78	40 78
14,396	160.00	160 00	14,462	80.00	80 00
14,397	80.00	80 00	14,463	78.00	78 00
14,398	8.00	80 00	14,464	40.00	40 00
14,400	80.00	80 00	14,465	5.55	5 55
14,401	11,757.17	11,757 17	14,470	120.00	120 00
14,402	40.00	40 00	14,471	10.77	10 77
14,403	80.12	80 12	14,472	39.96	39 96
14,404	40.22	40 22	14,473	379.30	379 30
14,408	120.04	120 04	14,474	39.99	39 99
14,409	79.90	79 90	14,477	80.00	80 00
14,410	43.20	86 40	14,478	40.00	40 00
14,414	80.00	80 00	14,480	83.23	83 23
14,417	39.99	39 99	14,481	83.23	83 23
14,419	39.95	39 95	14,482	40.00	40 00
14,421	39.89	39 89	14,483	3.44	3 44

\*\$56.37 on this entry paid Treasurer March 16, 1892. See his report.

No. Entry.	Acres.	Price.	No. Entry.	Acres.	Price.
14,484	79.76	\$79 76	14,614	86.75	\$86 75
14,487	83.23	83 23	14,621	40.00	40 00
14,488	76.04	76 04	14,622	40.00	40 00
14,490	40.00	40 00	14,624	40.38	40 38
14,492	81.27	81 27	14,626	2.84	2 84
14,493	83 23	83 23	14,627	40.00	40 00
14,496	159.80	159 80	14,628	80.02	80 02
14,497	80.00	80 00	14,631	37.82	37 82
14,500	39.97	39 97	14,639	80.00	80 00
14,506	39.95	39 95	14,644	174.06	174 06
14,512	40.14	40 14	14,649	40.00	40 00
14,513	80.28	80 28	14,650	119.70	119 70
14,519	40.00	40 00	14,652	40.00	40 00
14,522	31.50	31 50	14,653	80.00	80 00
14,523	40.00	40 00	14,655	80.00	80 00
14,524	39.91	39 91	14,657	40.00	40 00
14,528	39.97	39 97	14,658	63.34	63 34
14,529	200.04	200 04	14,659	40.00	40 00
14,530	45.50	45 50	14,663	39.95	39 95
14,532	87.03	87 03	14,665	41.38	41 38
14,533	5.20	5 20	14,669	39.88	39 88
14,534	80.10	80 10	14,675	79.94	79 94
14,535	40.03	40 03	14,676	80.00	80 00
14,538	39.87	39 87	14,688	39.09	39 09
14,539	40.00	40 00	14,691	160.00	160 00
14,541	79.69	79 69	14,695	31.50	31 50
14,546	40.05	40 05	14,696	100.00	50 00
Total,			14,702	40.02	40 02
1891	18,622.52	\$18,744 75	14,705	40.00	40 00
			14,706	80.00	80 00
14,552	36.00	\$36 00	14,713	40.00	40 00
14,556	79.89	199 72	14,714	160.00	160 00
14,558	40.00	40 00	14,747	8.00	8 00
14,559	39.85	39 85	14,751	320.38	320 38
14,585	39.85	39 85	14,752	400.00	400 00
14,586	40.05	40 05	14,755	80.00	80 00
14,588	80.06	80 06	14,756	40.05	40 05
14,591	109.00	109 00	14,757	4.150 96	*4,150 96
14,592	41.33	41 33	14,763	28.25	28 25
14,594	79.95	79 95	14,764	40.00	40 00
14,599	39.94	39 94	Total,		
14,600	40.10	40 10	1892	8,471.56	\$8,541 39
14,601	80.00	80 00			
14,602	40.00	40 00			
14,603	83.23	83 23			
14,604	41.62	41 62			
14,605	40.05	40 05			
14,606	39.90	39 90			
14,607	39.93	39 93			
14,610	80.00	80 00			
14,611	76.50	76 50			
14,612	120.00	120 00			

\*\$2,000 paid Treasurer in 1891. See his report.

LIST OF SWAMP LANDS SOLD UNDER THE PROVISIONS OF CHAPTER  
3451, ACTS OF 1883, AT 25C. PER ACRE, DURING THE YEARS  
1891 AND 1892.

No. of Entry.	Acres.	Amount.	No of Entry.	Acres.	Amount.
14,361	80.15	\$20 04	14,620	80.00	\$20 00
14,364	77.95	19 49	14,632	80.00	20 00
14,424	79.90	19 98	14,633	80.30	20 08
14,429	40.04	10 01	14,637	40.00	10 00
14,430	80.09	20 02	14,641	40.00	10 00
14,438	40 17	10 04	14,642	79.63	19 91
14,447	79.63	19 91	14,643	39.89	9 97
14,454	80.41	20 10	14,662	80.25	20 06
14,495	80.12	20 03	14,668	80.00	20 00
14,504	80.00	20 00	14,673	80.12	20 03
14,507	79.75	19 88	14,697	80.58	20 15
14,508	79.81	19 95	14,701	40.00	10 00
14,509	80.47	20 12	14,709	40.00	10 00
14,514	39.81	9 96	14,711	60.95	15 24
14,516	80.40	20 10	14,718	40.13	10 03
14,518	80.53	20 13	14,728	40.12	10 03
Total.			14,730	79.22	19 80
1891	1,159.23	\$289 76	14,734	79.27	19 82
			14,754	80.25	20 06
14,553	79.92	19 93	Total.		
14,609	82.03	20 51	1892	1,382.66	\$345 62

LIST OF SWAMP LANDS SOLD UNDER SPECIAL CONTRACT DURING  
THE YEARS OF 1891 AND 1892

	No. of Entry.	Acres.	Amount of Sale.	Cash Paid.
Sale to M. R. Marks, W. L. Palmer, Cecil G. Butt and others of the unsurveyed Swamp Lands in T. 30, 31 and 32, R. 36, and T. 31 and 32, R. 37. Contract made December 27, 1890. As to first payment, see report of Treasurer I. I. Fund, December 29 1890 .....	No entry has yet been made.	112,000.00	\$56,000.00	\$15,000.00
Sale to J. A. Marvin and Associates, comprising The Miccosukie Drainage Company, of unsurveyed lands in Lake Miccosukie, in T. 2 N., Rs. 3 and 4 E., and T. 3 N., R. 4 E. Contract made January 1, 1892 .....	No entry has yet been made.	8,909.00	8,909.00	500.00
Sale to R. E. Lester and others, of the lands in Lake Iamonia, in T. 3 N., R. 1 W., and T. 3 N., R. 1 E. Made November 5, 1892 .....	14,737	5,626.00	5,626.00	626.00
Total for 1891 and 1892 .....		126,535.00	\$70,535.00	\$16,126.00

LIST OF SWAMP LANDS SOLD UNDER THE PROVISIONS OF CHAPTER  
3324, LAWS OF FLORIDA, DURING THE YEARS 1891 AND 1892.

No. of Entry.	Acres	Amount of Sale.	Cash Paid.
14,420	39.95	\$39.95	\$13.35
14,426	160.25	160.25	53.42
14,741	80.03	80.03	23.35
Total.			
1891 1892 ..	280.23	\$280.23	\$90.12

LIST OF SWAMP LANDS SOLD UNDER THE PROVISIONS OF CHAPTER 3324, LAWS OF FLORIDA, PRIOR TO JANUARY 1, 1891, UPON WHICH PAYMENTS WERE MADE DURING THE YEARS 1891 AND 1892.

No. of Entry.	No. of Installment.	Amount Paid
14,221	2 and 3	\$22 78

LIST OF SWAMP LANDS SOLD UNDER THE PROVISIONS OF CHAPTER 3395, LAWS OF FLORIDA—FIRST PAYMENT BEING 10 PER CENT.—DURING THE YEARS 1891 AND 1892.

No. of Entry.	Acres.	Amount of Sale.	Cash Paid.
14,345	58.30	\$145 75	\$15 00
14,503	21.50	64 50	6 00
Total.			
1891, 1892..	79 80	\$210 25	\$21 00

LIST OF SWAMP LANDS SOLD UNDER CHAPTER 3995, LAWS OF FLORIDA, PRIOR TO JANUARY 1, 1891, UPON WHICH PAYMENTS WERE MADE DURING THE YEARS 1891 AND 1892.

No. of Entry.	Amount Paid.
14,218	\$179 92
14,227	156 87
14,240	60 00
14,257	200 00
14,274	68 00
14,277	60 00
14,285	108 00
14,291	56 00
14,304	180 00
Total.	
1891, 1892..	\$1,068 79

## RAILROADS.

LIST OF RAILROAD COMPANIES AND CANALS WHICH HAVE RECEIVED SWAMP LANDS UNDER THEIR RESPECTIVE GRANTS.

Date.	No. of Deed.	Corporation.	Acres.
Feb. 2, 1891	14,360	Florida Coast Line Canal and Transportation Company .....	275.49
" 19, "	14,369	Jacksonville, Tampa and Key West Railway Company .....	493.56
Mar. 13, 1891	14,393	Florida Coast Line Canal and Transportation Company .....	445.46
July 14, 1891	14,469	Florida Coast Line Canal and Transportation Company .....	160.60
Oct. 5, 1891	14,502	Florida Coast Line Canal and Transportation Company .....	80.00
Nov. 30, 1891	14,525	Pensacola and Atlantic Railroad Co. . .	560.14
Dec. 28, 1891	14,542	Florida Coast Line Canal and Transportation Company .....	26.12
Total 1891 .....			2,041.37
Jan. 18, 1892	14,560	Florida Midland Railway Company ..	2,150.00
" 21, "	14,565	Orange Belt Railway Company .....	480.00
Feb. 12, 1892	14,578	Florida Southern Railway Co. ....	200.37
" " "	14,579	Jacksonville, Tampa and Key West Railway Company .....	600.87
" " "	14,580	Palatka and Indian River Railway Company .....	4,545.00
" " "	14,581	St. Johns and Lake Eustis Railway Company .....	120.28
" " "	14,582	St. Johns and Halifax R. R. Co. ....	1,425.76
" " "	14,583	Jacksonville, St. Augustine and Halifax River R'y Co. ....	2,985.44
" " "	14,584	St. Augustine and Palatka Railway Company .....	2,491.68
" 15, "	14,587	Orange Belt Railway Company .....	333.39
Mar. 8, 1892	14,598	Jacksonville, Tampa and Key West Railway Company .....	1,922.06
Apr. 2, 1892	14,623	Florida Central and Peninsular Railway Company .....	120.00
May 9, 1892	14,646	Tavares, Orlando and Atlantic Railroad Company .....	959.86
" " "	14,647	Tavares, Orlando and Atlantic Railroad Company .....	3,042.58
June 21, 1892	14,666	Jacksonville, Tampa and Key West Railway Company .....	2,039.89
" " "	14,667	Florida Southern R'y Co. ....	4,172.08
" 27, "	14,671	Silver Springs, Ocala and Gulf Railroad Company .....	1,405.51
" " "	14,672	Silver Springs, Ocala and Gulf Railroad Company .....	33,252.82



Date.	No. of Deed.	Corporation.	Acres.
Sept. 3, 1892	14,708	Florida Coast Line Canal and Transportation Company .....	40 00
" 22, "	14,721	East Florida Railway Co. ....	658 31
" " "	14,722	Sanford and Indian River Railroad Company.....	4,131.22
" " "	14,723	South Florida Railroad Co. ....	3,590 70
Dec. 19, 1892	14,761	Blue Springs, Orange City and Atlantic Railroad Company .....	2,486 05
" " "	14,762	Blue Springs, Orange City and Atlantic Railroad Company.....	50,890.74
" 24, "	14,766	Pensacola and Atlantic Railroad Co. ..	632.26
" 26, "	14,768	Florida Southern Railway Company ..	14,865.29
		Also, there has been deeded to railroads on account of certificates previously issued on lands, for which the State has since received patents :	
June 21, 1892	13,776-7-9 & 13,780	Florida Southern Railway Company ..	5,379.49
Dec 23 1892	13,816 & 13,835½	Pensacola and Atlantic Railroad Co....	89,717.02
Total, 1892 .....			234,588 67

Lands conveyed to S. A. Swann as Assignee of E. N. Dickenson by virtue of a deed issued to E. N. Dickenson, June 1, 1867, and as trustee of the old Florida Railroad Company, under the Internal Improvement act of January 6, 1855, during years of 1891 and 1892.

No. of Entry.	Acres.
Dec. 21, 1892.—14,536—S. A. Swann, assignee of E. N. Dickenson .....	1,199.60
Mar. 22, 1892.—14,613—S. A. Swann, assignee of E. N. Dickenson .....	999.02
April 4 1892.—14,625—S. A. Swann, assignee of E. N. Dickenson .....	1,760 83
June 30, 1892.—14,674—S. A. Swann, assignee of E. N. Dickenson .....	80 10
Total, 1891 and 1892 .....	4,039.55
Dec 21, 1892.—14,537—S. A. Swann, trustee of Florida Railroad Company .....	11,282.90
Dec. 15, 1892.—14,758—S. A. Swann, trustee of Florida Railroad Company .....	160.60
Total, 1891 and 1892 .....	11,443.50



STATEMENT OF LANDS DUE RAILROADS JANUARY 1, 1893.

Miles.	Acres per Mile.	Total Granted.	Total Conveyed.	Balance Due.	Name of Company.
161.00	20,000	3,220,000.00	*2,118,093.37	1,101,906.63	Pensacola and Atlantic.
282.22	10,000	2,882,200.00	*2,580,209.72	301,990.28	Florida Southern.
55.00	10,000	550,000.00	*425,570.25	124,429.75	Jack., Tampa and Key West.
70.00	6,000	420,000.00	419,677.45	322.55	Palatka and Indian River.
65.15	10,000	651,500.00	*394,136.31	257,363.69	Silver Springs, Ocala and Gulf.
20.00	15,000	300,000.00	*108,971.18	191,028.82	Carrabelle, Tallahassee and Georgia, formerly the Augusta, Tallahassee and Gulf.
28 1/2	5,000	141,666.66	50,890.74	90,775.92	Blue Springs, Orange City & Atlantic.

\*In estimating the amounts conveyed to the several Land Grant Railroads, the unpatented lands for which certificates were given have been included. A great deal of the land embraced in these certificates never will be patented to the State, and therefore, can never be conveyed by deed to the railroad company which held the certificate. This is mentioned merely in justice to the railroads.

In addition to the acreage given above as yet due the several railroads, there are certain unadjusted claims which have never been recognized by the Trustees of the Internal Improvement Fund. The mileage of completed road not recognized as being entitled to the land grant being about 133 miles and the acres of land claimed being about 1,130,000.00 acres.

STATEMENT OF LANDS DUE RAILROADS WITH GRANTS ALLOWING THEM TO TAKE LANDS OUTSIDE OF  
THE SIX AND TWENTY MILE LIMITS TO MAKE UP AN AREA OF 3840 ACRES PER MILE.

Miles.	Acres per Mile.	Total Granted	Total Conveyed.	Balance Due.	Name of Company
40.00	3,840	153,600	60,424 71	93,175.29	South Florida Railroad Co., on road from Sanford to Kissimmee.
32.90	3,840	126,336	29,899 68	96,436 32	Western Railway of Florida

There is reserved for the Florida Coast Line Canal and Transportation Company in round numbers about 600,000 acres of patented and 350,000 acres of unpatented lands. There is held up for the Atlantic and Gulf Coast Canal and Okeechobee Land Company about 1,200,000 acres of patented and unpatented lands, and when the claims of this Company are adjusted, about 400,000 acres of land will be restored to market.

## SWAMP LAND INDEMNITY.

The quantity of lands located by the respective owners of Swamp Land Indemnity Certificates, which have been patented to the State, is as follows:

Amount as per last report..... 64,990.74 acres  
 Supplement "D" to Special Indemnity Patent No. 1. 106.90

Total ..... 65,097.64 acres

Of which there has been conveyed by the State to the owners of the certificates, or to such persons as they direct, as per last report..... 52,587.29 acres

Conveyed during the years 1891 and 1892..... 1,951.93

Total ..... 54,539.22 acres

## INTERNAL IMPROVEMENT LANDS.

Amount on hand January 1, 1891, (by actual calculation).....117,398.19 acres

Amount sold in 1891 ..... 4,706.28

Amount sold in 1892 ..... 3,132.90— 7,839.18

Balance on hand January 1, 1893.....109,559.01 acres

LIST OF INTERNAL IMPROVEMENT LANDS SOLD DURING  
1891 AND 1892.

No. of Entry.	Acres.	Amount.	No. of Entry.	Acres.	Amount.
14,338	40.10	\$50 12	14,433	40.03	\$50 04
14,339	80.10	100 12	14,440	81.42	101 77
14,340	80.15	100 19	14,445	174.54	218 18
14,342	40.29	50 36	14,457	39.87	49 84
14,346	39.10	48 87	14,461	40.00	50 00
14,348	40.03	50 04	14,467	40.14	50 18
14,349	39.78	49 72	14,475	798.91	998 64
14,362	40.24	50 30	14,476	1.38	1 75
14,365	40.00	50 00	14,485	40.00	50 00
14,370	39.82	49 78	14,486	40.00	50 00
14,372	200.10	450 23	14,489	79.69	99 61
14,374	40.02	50 03	14,494	40.22	50 28
14,377	80.00	100 00	14,501	128.25	160 31
14,380	228.15	285 19	14,505	81.00	101 25
14,385	40.12	50 15	14,511	40.25	50 31
14,386	39.81	49 76	14,527	126.87	158 59
14,388	32.50	40 63	14,543	78.28	97 85
14,399	40.02	50 02	14,547	80.00	100 00
14,405	39.89	49 86	Total		
14,406	39.88	49 85	1891	3,419.36	\$4,524 50
14,411	40.13	100 32			
14,413	80.03	100 04	14,567	40.12	\$50 15
14,416	48.11	60 14	14,572	40.24	50 30
14,423	40.14	50 18	14,573	160.12	200 15

No. of Entry.	Acres.	Amount.	No. of Entry.	Acres.	Amount.
14,596	47 69	\$59 61	14,736	40.00	\$80 00
14,608	40 04	50 05	14,738	291.77	364 71
14,617	39.72	49 65	14,749	40.00	50 00
14,651	80.00	100 00	14,753	481.13	601 43
14,656	39.90	79 80	14,759	80 85	101 06
14,690	160 12	200 15	14,767	486.88	608 60
14,704	40 08	50 12	14,769	40 00	80 00
14,707	79 88	99 85	Total		
14,720	110 00	137 50	1892	2,370 40	\$3,052 95
14,731	31 86	39 82			

LIST OF INTERNAL IMPROVEMENT LANDS SOLD UNDER THE PROVISIONS OF CHAPTER 3324, LAWS OF FLORIDA, DURING THE YEARS 1891 AND 1892.

No. of Deed.	Acres.	Amount of Sale	Cash Paid.	No. of Deed.	Acres.	Amount of Sale.	Cash Paid.
14,843	80 00	\$100 00	\$33 34	14,551	40.76	\$50 95	\$17 00
14,850	39 69	49 61	16 67	14,574	40 25	50 31	17 00
14,853	40 17	100 43	33 50	14,589	39.99	49 99	16 70
14,856	80.00	100 00	33 40	14,615	88.03	100 04	34 00
14,857	79.84	99 80	33 35	14,618	120.29	150 36	50 12
14,871	39.10	48 87	16 67	14,645	160.94	201 18	67 00
14,879	79.84	99 80	33 35	14,654	40.06	50 08	36 00
14,881	39 84	49 80	16 70	14,683	40.06	50 08	16 70
14,884	40 00	50 00	16 67	14,684	40.03	50 04	16 70
14,407	40.24	50 30	16 77	14,703	40.00	50 00	17 00
14,412	160.00	200 00	67 00	14,760	40.06	50 07	16 70
14,415	119.67	149 59	49 90	14,765	80.03	100 04	33 35
14,425	39.95	49 94	16 65	Total			
14,479	40 04	60 06	20 00	1892	762.50	\$338 27	\$338 27
14,515	39.95	49 94	16 70				
14,517	80.50	100 63	34 00				
14,520	168.09	210 11	70 00				
14,526	80.00	100 00	33 35				
Total							
1891	1,286.92	\$1,668 88	\$558 02				

LIST OF INTERNAL IMPROVEMENT LANDS SOLD UNDER THE PRO-  
VISIONS OF CHAPTER 3324, LAWS OF FLORIDA, PRIOR TO  
JANUARY 1, 1891, UPON WHICH PAYMENTS WERE  
MADE DURING THE YEARS 1891 AND 1892.

No. of Certificate	No. of Installment	Amount Paid.	No. of Certificate	No. of Installment.	Amount Paid.
13,701	3	\$31 05	14,025	3	\$16 60
13,714	3	26 73	14,057	3	33 33
13,724	3	53 34	14,078	3	16 58
13,902	2	80 00	14,087	3	33 21
13,943	2	26 74	14,092	2	66 93
13,954	2	33 45	14,093	2	66 58
13,966	2	33 38	14,097	2	33 28
13,970	2	66 65	14,100	2	50 47
13,975	2	16 55	14,103	2	16 72
13,992	2	16 63	14,115	2	16 60
14,005	2-3	66 65	14,137	2	16 68
14,025	2	16 63	14,148	3	17 41
14,057	2	33 33	14,149	2-3	66 50
14,065	2-3	33 30	14,150	2-3	99 70
14,071	2-3	33 28	14,161	3	16 66
14,078	2	16 60	14,162	2-3	135 51
14,087	2	33 30	14,170	2	16 60
14,141	2-3	33 37	14,175	2-3	33 36
14,148	2	17 41	14,176	2	33 36
14,161	2	16 67	14,187	2	16 65
14,384	2-3	33 34	14,199	2	33 35
Total, 1891 .....		\$718 40	14,205	2	33 35
			14,254	2	16 70
12,665	3	33 40	14,256	2	16 10
			14,266	2	33 33
13,826	2-3	66 70	14,267	2-3	66 70
13,895	2-3	66 54	14,268	2	33 35
13,902	3	50 00	14,271	2	16 65
13,943	3	26 72	14,278	2	16 68
13,954	3	33 44	14,287	2	33 25
13,966	3	33 35	14,324	2	16 70
13,970	3	66 65	14,379	2	33 25
13,975	3	16 55	Total 1892 .....		\$1,562 12
13,992	3	16 63			

SCHOOL LANDS.

Amount on hand January 1, 1891 (Approximated) .. 406,162.05 acres

Amount sold during years 1891 and 1892 .. 19,853.81

Entered by S. I. Waller on his account as  
per order of Board of Education,  
January 12, 1892..... 140 83

Total disposed of up to January 1, 1893..... 19,994.64 acres

Balance on hand January 1, 1893..... 386,167.41 acres

## LIST OF SCHOOL LANDS SOLD DURING THE YEARS 1891 AND 1892.

No. of Entry.	Acres.	Amount.	No. of Entry.	Acres	Amount.
2,439	160 00	\$200 00	2,492	160.63	\$200 79
2,440	26.52	33 15	2,494	80.00	100 00
2,441	40.12	50 15	2,495	80.00	100 00
2,442	240 09	300 11	2,496	80.00	100 00
2,443	79 96	99 95	2,497	40 00	50 00
2,444	401.05	501 36	2,498	80 30	100 38
2,445	79.88	99 85	2,500	39 94	49 93
2,446	39 78	59 67	2,501	309 12	386 40
2,447	198.75	397 50	2,503	200.50	250 63
2,448	40.10	50 12	2,504	486 00	480 00
2,449	40.12	50 15	2,505	1,440 00	1,440 00
2,450	40.12	50 15	2,506	40.00	50 00
2,451	40.12	50 15	2,507	40 10	50 12
2,452	560.68	700 85	2,510	80 10	100 12
2,453	321.00	401 23	2,511	160.00	200 00
2,454	40 66	50 82	2,512	40 05	50 06
2,455	78 74	98 42	2,513	39 98	49 97
2,456	39.86	49 82	2,514	320 00	320 00
2,457	160.31	200 39	2,515	960.00	960 00
2,458	40.00	50 00	2,516	159.68	199 60
2,459	80.03	100 04	2,517	639.88	639 88
2,460	80.03	100 04	2,519	40 00	50 00
2,461	200.94	251 18	2,520	120 00	150 00
2,462	80.06	100 07	2,521	40.05	50 07
2,464	160.00	200 00	2,522	40.03	604 46
2,465	644 25	483 19	2,523	40.00	50 00
2,466	39.96	49 95	2,524	399.17	399 17
2,467	80.06	100 07	2,525	40 22	50 28
2,468	39.90	49 87	2,526	40 00	50 00
2,470	282.31	352 89	2,527	40.04	50 05
2,471	39 87	49 84	2,528	39.94	49 93
2,472	40.12	50 15	2,530	39 96	49 95
2,473	247.47	309 84	2,531	40 00	50 00
2,474	115 01	143 77	Total		
2,475	40.66	50 83	1891	14,273.26	\$17,270 06
2,476	239.18	298 97			
2,477	120 55	150 69	2,532	40 00	\$50 00
2,478	40 12	50 15	2,538	39 94	49 92
2,479	640.00	800 00	2,539	40.00	50 00
2,480	24 00	30 00	2,541	159.56	199 45
2,481	40 33	50 41	2,542	517.66	647 07
2,482	40.15	50 19	2,543	79 91	99 90
2,484	159.19	198 99	2,544	28 43	35 54
2,485	79.94	99 93	2,545	480 00	600 00
2,486	201.13	251 41	2,546	37 60	46 25
2,487	640.48	800 60	2,547	17.50	21 88
2,488	39.69	49 61	2,549	31 60	39 50
2,489	387.50	581 25	2,550	154 33	192 92
2,490	39.96	49 95	2,551	74.00	92 50
2,491	352.82	441 08	2,552	800.00	1,000 00



No. of Entry.	Acres.	Amount.	No. of Entry.	Acres.	Amount.
2,553	40.00	\$50 00	2,586	40.10	\$50 12
2,554	152.22	190 28	2,587	476.85	596 06
2,555	128.11	160 14	2,588	80.16	100 20
2,557	640.00	800 00	2,589	77.50	96 88
2,558	160.00	200 00	2,590	40 01	50 01
2,560	149.50	186 88	2,591	320 72	400 90
2,561	40.00	50 00	2,592	39 99	49 99
2,562	1,920.00	2,400 00	2,594	155.14	193 99
2,563	39.94	49 93	2,596	79 99	99 99
2,564	320.00	320 00	2,597	79.99	99 99
2,566	159.88	199 85	2,598	40.00	50 00
2,568	160.00	200 00	2,600	239.46	299 32
2,569	160.00	200 00	2,602	160.00	200 00
2,570	80.16	100 20	2,603	39 92	49 90
2,571	160.32	200 40	2,606	80.24	100 30
2,572	40.04	50 05	2,607	161.20	201 50
2,577	40.00	50 00	2,608	80.11	100 14
2,578	80.20	100 25	2,609	530.35	1,581 05
2,579	81.20	100 25	2,612	79.97	99 96
2,580	80.00	100 00	2,613	227.00	283 75
2,581	79.94	99 92	2,614	80.16	100 20
2,582	399.85	1,199 55	Total		
2,583	80.00	100 00	1892	3,788.65	\$6,353 66
2,585	40 00	50 00			

LIST OF SCHOOL LANDS SOLD UNDER THE PROVISIONS OF CHAPTER 3324, LAWS OF FLORIDA, FOR THE YEARS 1891 AND 1892.

No. of Certificate.	Acres.	Amount of Sale	Amount Paid.	No. of Certificate.	Acres.	Amount of Sale	Amount Paid.
2,438	80.31	\$100 39	\$33 50	2,556	39.95	\$49 94	\$16 65
2,463	40.06	50 08	16 70	2,559	78.40	98 00	32 60
2,493	39.52	49 40	16 70	2,565	79.84	99 80	35 00
2,499	80.50	100 63	33 32	2,567	80.50	100 63	33 35
2,502	34.94	49 93	16 67	2,573	39.98	49 98	16 70
2,508	39.93	49 91	16 66	2,574	39.98	49 98	16 70
2,509	40.06	50 07	16 65	2,575	39.94	49 93	16 66
2,518	40.07	50 09	16 65	2,576	37.32	46 65	16 65
2,529	79.84	99 80	33 35	2,584	80.50	100 62	33 35
Total				2,593	39.69	49 61	16 65
1891	475.23	\$600 30	\$200 20	2,599	39.98	49 98	16 70
				2,601	39.89	49 86	16 67
2,533	79.84	99 80	33 35	2,604	80.34	100 43	33 35
2,534	80.50	100 63	33 55	2,605	39.96	49 95	16 34
2,535	120.00	150 00	50 00	2,610	79.93	99 92	33 35
2,537	39.96	49 95	16 67	2,611	40.17	50 21	16 70
2,540	80.00	100 00	33 35	Total			
2,548	40.00	50 00	16 70	1892	1,316.67	\$1,645 87	\$551 04



LIST OF SCHOOL LANDS SOLD UNDER THE PROVISIONS OF CHAPTER 3324, LAWS OF FLORIDA, PRIOR TO JANUARY 1, 1891, UPON WHICH PAYMENTS WERE MADE DURING THE YEARS 1891 AND 1892.

No. of Certificate	No. of Installment.	Amount Paid.	No. of Certificate	No. of Installment.	Amount Paid.
1,449	3	\$50 00	2,361	3	\$16 18
1,801	2-3	66 53	2,367	2-3	95 21
2,091	2-3	133 34	2,378	2	17 00
2,178	3	16 69	2,379	2	33 10
2,308	2	33 30	2,380	2	33 10
2,310	2-3	66 72	2,383	2-3	134 15
2,327	2	16 34	2,384	2	33 00
2,361	2	16 18	2,386	2	<del>65 69</del>
Total 1891 .....		\$399 10	2,387	2	16 64
			2,389	2	66 65
2,320	2-3	66 82	2,395	2	49 42
2,256	2-3	66 62	2,404	2	17 50
2,281	2-3	66 65	2,405	2	16 69
2,316	2-3	33 38	2,406	2	17 00
2,329	2	16 65	2,412	2-3	32 31
2,331	2	49 95	2,418	2	16 67
2,332	2	33 30	2,420	2-3	66 65
2,346	2	50 05	2,430	2	33 10
2,347	2	33 35	Total 1892 .....		\$1,243 63
2,357	2	66 80			

SEMINARY LANDS.

Amount on hand January 1, 1891 (by actual calculation)..... 30,875.86 acres  
 Amount sold during years 1891 and 1892..... 79.81

Balance on hand January 1, 1893 ..... 30,796.05 acres

LIST OF SEMINARY LANDS SOLD DURING THE YEARS 1891 AND 1892.

No of Entry	Acres.	Amount.
2,469	39.81	\$49 76
Total 1891 .....		\$49 76
2,595	40.00	\$50 00
Total 1892 .....		\$50 00

LIST OF SEMINARY LANDS SOLD UNDER THE PROVISIONS OF CHAPTER 3324, LAWS OF FLORIDA, PRIOR TO JANUARY 1, 1891, UPON WHICH PAYMENTS WERE MADE DURING THE YEARS 1891 AND 1892.

No. of Certificate.	No. of Installment.	Amount Paid.
2,055	3	\$16 70
2,232	3	65 16
2,242	3	66 64
2,286	2	32 58
Total, 1891 and 1892	.....	\$181 08

# RECAPITULATION OF SALES—1891 AND 1892.

1891.	SWAMP.			INTERNAL IMPROVEMENT.			SCHOOL.			SEMINARY.		
	Acres.	Amount of Sale.	Cash Paid.	Acres.	Amount of Sale.	Cash Paid.	Acres.	Amount of Sale.	Cash Paid.	Acres.	Amount of Sale.	Cash Paid.
Cash entries.....	18,622.52	\$18,744 75	\$18,744 75	3,419.36	\$4,524 50	\$4,524 50	14,273.26	\$17,270 06	\$17,270 06	39.81	\$49 76	\$49 76
Entries under Chapter 3451 (25c)....	1,159.23	289 76	289 76	.....	.....	.....	.....	.....	.....	.....	.....	.....
Installment entries under Chapter 3324.....	200.20	200 20	66 77	1,286.92	1,668 88	558 02	475.23	600 30	200 20	.....	.....	.....
Installment entries under Chapter 3995 (10 per cent.).....	79.80	210 25	21 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Entries under special contract.....	112,000.00	55,000 00	5,000 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total sales 1891.....	132,061.75	\$75,444 96	\$24,122 28	4,706.28	\$6,193 38	\$5,082 52	14,748.49	\$17,870 36	\$17,470 26	39.81	\$49 76	\$49 76
Amount collected under installment entries previous years.....	.....	.....	592 79	.....	.....	718 40	.....	.....	399 10	.....	.....	181 08
Amount collected on previous entries.....	.....	.....	729 40	.....	.....	80 20	.....	.....	.....	.....	.....	70 00
Total cash, 1891.....	.....	.....	\$25,444 47	.....	.....	\$5,881 12	.....	.....	\$17,869 36	.....	.....	\$300 84
1892.												
Cash entries.....	8,471.56	8,541 39	8,541 39	2,370.40	\$3,052 95	\$3,052 95	3,788.65	\$6,353 66	\$6,353 66	40 00	\$50 00	\$50 00
Entries under Chapter 3451 (25c)....	1,382.66	345 62	345 62	.....	.....	.....	.....	.....	.....	.....	.....	.....
Installment entries under Chapter 3324.....	80.03	80 03	23 35	762.50	953 14	338 27	1,316.67	1,645 87	551 04	.....	.....	.....
Entries under special contract.....	14,535.00	14,535 00	11,126 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total sales 1892.....	24,469.25	\$23,502 04	\$20,036 36	3,132.90	\$4,006 09	\$3,391 22	5,105.32	\$7,999 53	\$6,904 70	40.00	\$50 00	\$50 00
Amount collected under installment entries previous years.....	.....	.....	498 78	.....	.....	1,562 12	.....	.....	\$1,243 63	.....	.....	.....
Total cash, 1892.....	.....	.....	\$20,535 14	.....	.....	\$4,953 34	.....	.....	\$8,148 33	.....	.....	.....

In addition to the work as set forth in the foregoing pages the following has been done in the Land Office :

All of the records relating to swamp, internal improvement, seminary and school lands have been transcribed into new record books. All of the old records were wearing out and in some instances falling to pieces, and to preserve the records it was necessary to have the work done.

The work of transcribing these records was performed partly by the regular force of the office, when not engaged in other work of the department, and by Mr. S. C. Tucker, of Gainesville, and Capt. H. T. Blocker, of Tallahassee. Mr. Tucker was also employed to mark upon the official maps of this office the lands rejected by the General Land Office as not coming within the provisions of the act of Congress of September 28, 1850, and he is now at work in the Gainesville Land Office in getting up information as to all lands entered at that office, so that the State Department will be in a position to furnish exact status of every tract in the State upon demand.

The Commissioner of Agriculture last May defended the claim of the State to something over 170,000 acres of land before the agents of the United States Land Office, at Jacksonville, and procured the patenting of said lands to the State, and he also went to Washington City last July and called up certain lands which had been held up in the General Land Office for years, and procured the patenting of the same to the State, amounting to about 30,000 acres.

## IMMIGRATION.

---

The Legislature of 1891, having repealed the statute establishing the Bureau of Immigration, it becomes my duty to make the following report of the operations of the Bureau from the date of my last report to the time when its affairs were wound up in accordance with such repeal :

A large number of copies of the Times-Union trade edition were forwarded to Arthur C. Jackson at Edinburgh, Scotland, where he was supposed to be arranging for a Florida exhibit at the International Exposition, but as he had left there before they reached him, I ordered them reshipped to London, England, at a cost for freight and charges of \$32.67 paid the Caledonian Railway Company by warrant No. 1,076, March 3, 1891. I afterwards endeavored to arrange for the judicious distribution of this matter, but was obliged to abandon it on account of the expense of securing agents to attend to it.

During the latter part of the year 1890 the Bureau commenced the collection of an exhibit of preserved fruits to be kept in the Jacksonville office, in glass jars especially designed for such purpose, and this exhibit was partially completed at an expense, as shown by the financial statement herewith of \$154.56. This exhibit partially completed, still exists for the accomplishment of the purpose for which it was intended, as is shown elsewhere in this report.

On the 9th of February, 1891, the Bureau contracted with the Graphic Company, of Chicago, Illinois, for a number of half-page illustrated articles on Florida to appear in certain issues of the Weekly Graphic, two of which articles appeared and were paid for by warrant No. 1940, April 22, 1891, for \$80. The Bureau also at the same time contracted with the Graphic Company for a quarter of a column, or fifty lines, of reading matter about

Florida, weekly, in the Graphic for one year, for the sum of \$520, payable quarterly. This contract was duly executed by the Graphic Company for the first quarter, ending June 1, 1891, and the same was paid for on that date by warrant No. 2626, for \$130, and the company was promptly notified of the repeal of the statute establishing the Bureau, and the consequent abrogation of the contract. On the 4th of March, 1891, the sum of \$500, balance in full for the 15,000 copies of the Times-Union trade edition purchased in 1889, was paid by warrant No. 1086.

On the 7th of May, 1891, Mr. Julius Potsdamer, of Lake City, Florida, was appointed a special agent of the Bureau to work in the interest of immigration to Florida from Germany, where he contemplated spending some months, and the sum of \$150 was appropriated by the Bureau as compensation for such service, and paid by warrant No. 2197 of that date. A quantity of printed matter in the German language, kindly supplied by Mr. Walter G. Coleman, General Traveling Agent of the Florida Central and Peninsular Railroad, was turned over to Mr. Potsdamer, and with other printed matter, distributed by him in Europe. His report is presented herewith as Appendix A.

During the period from January 1, 1891, to the time when the affairs of the Bureau were wound up, a total of over seven hundred letters and telegrams were received and sent in conducting the business of the Bureau, and a much larger number of packages of printed matter were also sent out in response to applications therefor.

The publication of the Monthly Bulletin jointly as a means of disseminating information about Florida abroad, and as a medium for the publication of the crop reports and other matter of the Bureau of Agriculture and Bureau of Fertilizers, was continued until and including the June number, 1891, when the size of the paper was reduced one-half, and the edition cut down to 2,500. Beginning with the February issue 1891, the expenses of publication were equally divided between the Bureau of Immigration and the Bureau of Agriculture, and so continued until July 1, since which time the cost has been borne solely by the Bureau of Agriculture. The



amount of \$361.79 shown by my last report to be the value of the space used in the Bulletin of 1890 by the Bureau of Agriculture (less a small payment), has not been transferred to the Immigration Fund, the financial condition of the Bureau of Agriculture not permitting such an adjustment of the account. Neither has any sum been transferred by the land department to the Immigration Fund to pay for space used in the Bulletin for the advertisement of the State lands, as detailed in my last report.

On the 24th of June, 1891, Capt. Francis Irsch, of New York, was appointed, with the approval of the Governor, as general agent of immigration to Florida for the United States and Europe. Capt. Irsch was then, and has since been, engaged in the organization and operation of a colonization company intended to effect immigration from other states and countries to Florida, and it was and is believed that a large success in this direction awaits the skillful and judicious execution of the excellent plans for bringing immigrants to Florida which have been adopted by that company, of which Capt. Irsch is Vice-President and General Manager. No salary or other compensation whatever was contemplated in making said appointment, nor the expenditure of any public funds for expenses or otherwise. Capt. Irsch soon after his appointment, procured desirable and commodious offices in the city of Jacksonville, and the furniture, supplies of printed matter and the partially completed exhibit of fruits and other products, then in the Jacksonville branch office of the Bureau were turned over to him, and are now being used by him in the interest of immigration to Florida.

The unexpected action of the Legislature of 1891, in repealing the statute establishing the Bureau of Immigration, just as it promised to achieve a substantial success in its efforts to bring in immigration, and after the period of experience and experimentation had practically passed, rendered much of its previous work ineffective, and necessitated the abandonment of its plans; but the work of encouraging immigration has not been discontinued, but has been continuously prosecuted as effectively as the means at hand would



permit, by the dissemination of printed matter concerning Florida in response to constant and numerous inquiries from other States and countries. The General Agent, at his own expense, has kept an agent employed in this work, who has occupied space in the same office formerly used for the Bureau of Immigration.

The report of the General Agent appears herewith as Appendix B.

The financial statement presented herewith as Appendix C, shows the total disbursements of the fund devoted to the support of the Bureau from January 1, 1891, to the winding up of its affairs; and a summary appended thereto shows the total receipts and expenditures for the entire period covered by the Bureau, with a balance left on hand in the State Treasury amounting to \$7 018.22.

Section 5 of the act establishing the Bureau of Agriculture makes it the duty of the Commissioner to "prepare, under his own direction, a hand-book, describing the geological formation of the various counties of this State, and also the topographical features of said counties, with information as to the general adaptation of the soil of said counties for the various products of the temperate and semi-tropical zones. And for the purpose of obtaining a more general and careful estimate of the capacity and character of the soil of the counties of this State, he shall secure correct analysis of the same."

The Legislature having made no appropriation for the expense of carrying out this provision, no steps have been taken to perform this portion of the duties imposed upon the Commissioner. The fund arising from the inspection of fertilizers has not been sufficient, as appears elsewhere in this report, to do more than maintain the other sections of the work of the Bureau of Agriculture, and unless some provision is made by the Legislature of 1893 for prosecuting this branch of the work of that Bureau, the provision above quoted will remain, as heretofore, a dead letter. The supply of printed matter intended to furnish information about the State to inquirers, is almost entirely exhausted, and I therefore very strongly

and urgently recommend that the aforesaid balance of \$7,018.22, remaining in the Immigration Fund, be appropriated to the purpose of preparing such hand-book. It is badly needed, and the application of said fund to such a purpose, directly in the interest of immigration, will be singularly appropriate, and doubtless eminently satisfactory to the people who paid the immigration tax which created the fund.

---

## APPENDIX "A."

---

Hon. L. B. Wombwell, Commissioner of Agriculture and Immigration, Tallahassee, Florida:

DEAR SIR—I beg herewith to make formal report of my trip to Germany as special Immigration Agent for the State of Florida, I left Florida on the 12th of May, 1891. In New York I called on Col. John B. Weber, Superintendent of Immigration, and Mr. Reinberg, representative of the United Hebrew Charities, at Castle Garden, and both gentlemen accorded me valuable courtesies.

In Germany, at Hamburg, I found a good deal of California advertisements about the hotels and I remained there four days and distributed a large quantity of Florida matter and also spoke to a great many concerning the advantages offered by our State to immigrants.

At Berlin I called on Minister Phelps, who, through his secretary, advised me to work very cautiously, in order that no trouble with the government might result through violation of its prohibition of immigration agents. Observing this advice, I yet succeeded in distributing some circulars among the working people of that capital.

From this point I worked Breslau, a city of 500,000 population, Glogan Lissér, Nakel, Posen, Bromberg, Gleinitz and several smaller towns in the province of Posen. I reserved some of the pamphlets to distribute among steerage passen-

gers aboard the ship on the return home. There were more than one thousand of those, talked with a great many of them, but found most of them provided with through tickets by the Pennsylvania railroad lines for the West, which through ticket plan seemed to be their best card.

This leads me to the conclusion that our Florida railways could accomplish for us more in this direction than any other agency, by through traffic arrangements with the Inter-Oceanic lines of transportation.

I succeeded in changing the mind of only four young men, who went to the phosphate works near Ocala.

Respectfully submitted,

JOHN POTSDAMER.

## APPENDIX "B."

TALLAHASSEE, FLA., December 31, 1892.

Hon. L. B. Wombwell, Commissioner of Agriculture:

DEAR SIR—I have the honor to submit the following report on immigration to Florida from the time of my appointment as General Agent, June 24, 1891, to date.

At the outset, I wish to thank Governor Fleming, yourself and your subordinates, for their wise counsel, cheerful assistance and uniform courtesy exhibited towards the writer, his subordinates and colonists. I am also indebted to the United States Commissioner and Assistant Commissioners at Washington and Ellis Island, N. Y., for courtesies and valuable information relative to desirable foreign immigration, etc., of which I will speak later; and to the Colonization, Mining and Commercial Company of Florida, Limited, for financial aid and co-operation, without which the several offices of the State, and at New York and Chicago, could not have been maintained, nor colonies established or recruited and maintained until they became self-supporting.

In accordance with the plans adopted, and embraced in the

correspondence with his Excellency, the Governor, and yourself, to which I beg to refer for details, the latter part of the year 1891 was consumed in preliminary work, such as establishing suitable sub-agencies and offices in the various cities mentioned, traveling through the State in search of eligible locations for colonies, for agricultural and industrial purposes, separately and combined. A tour through the West and Northwest, from whence many inquiries had come, resulting in the forming of several societies whose purpose it is to emigrate to Florida, with some aid required and promised on behalf of the company; but the good crop in the West and the poor cotton prices and decadence of the phosphate industry in Florida were retarding factors, and excepting a few individual immigrants from that section, no direct results were obtained by these efforts. It is believed, however, that the West and Northwest, particularly since the cholera scare has made European immigration for the time being difficult, and to some extent undesirable, are now undoubtedly the best recruiting grounds to obtain agriculturists for our State; and the more enterprising western capital would speedily follow to develop industrially the varied and vast resources of Florida.

The World's Fair at Chicago offers a most rare and favorable opportunity to induce immigration to and industrial enterprises for Florida by a full exhibit of its immense resources and products.

There has been considerable correspondence with all parts of the Union and of Europe with prospective settlers for Florida, and much of the Florida literature left over by the late Bureau of Immigration has been disseminated, as well as some new matter commenting on the many advantages Florida offers to the small farmer, manufacturer and artisan, as well as capitalist, all, as I believe, with good results, in spite of the disinclination of European and American capital to invest in new enterprises.

During 1892 a colony of Swiss, German and American small farmers, artisans and men of moderate means, was located on the Manatee river, between Ellenton and Erie, on a large plateau of prairie and hammock land, where a town has been

laid out, with wide streets and a park, with town lots one acre front and two acres deep, and in farms of nine or eighteen acres, according to the pleasure and means of the colonist, to be sold on credit or small cash payment. Animals, agricultural implements, tools, lumber for building, were furnished liberally at wholesale prices to the colonists by the Colonization, Mining and Commercial Company, on whose land the colony was located, on credit, with easy payments, and a farm of forty acres cleared and fenced for co-operative farming for the first year; several miles of broad ditches were dug to drain the town, farms and surrounding country; church, school and store-house are in a large, three-story building, which is also used for amusements, and two-story houses were built for the colonists to live in. The drainage proved perfect, but the land being sour, and not treated in time with lime or plaster and ground phosphate, yielded little. Some of the colonists, not heeding the usual precautions, were taken ill with fever and were unable to put in a full crop; some became discouraged and a few returned north. Subsequently all colonists who remained recovered their health and are now contented and working diligently on their gardens and farms for a spring crop of tomatoes, tobacco, cabbage, squash, etc., and two of the colonists who have treated their scrub palmetto garden lots with lime, Florida ground phosphate and stable manure, after plowing deep and airing their land, produced handsome Irish potatoes within ninety days after planting, and squashes and tomatoes seem to thrive in the same lots. I mention these details, as barren and scrub palmetto land is usually considered unproductive, so that others can profit by the experiment.

Later on I will report further on the progress of this colony, upon the success of which many other partly organized colonies are waiting and watching, before casting their lot in Florida. I am satisfied that it is a success assured, and that the town of "Fleming" (named in honor of Governor Fleming) and its suburbs, will prosper in future.

Through the courtesy of Col. Weber and Gen. O'Bierne, I was permitted to watch and converse with the immigrants



arriving from Europe at Ellis Island, New York harbor, and find that while there is some truth in the common assertion that the quality of the European immigration has deteriorated much, I find this is much exaggerated. There are still many good and desirable immigrants coming from Europe, or were until the cholera quarantine reduced and restricted the number. Unfortunately for Florida, the largest and most desirable portion of these have always had fixed destinations in the West, where relatives and friends await them or have sent for them. Quite a number have means, and I think after the fear of cholera has disappeared, it will be worth while for the State to try and recruit from this source, as well as from Europe direct, as the congested labor centres of the North do not care for them, which is and will be the South's, and particularly Florida's opportunity; and if the movement for direct trade between Europe and southern seaports succeeds, then immigration to the Southern States will be additionally furthered, and while paupers and criminals are as objectionable South as anywhere else, there is room and a decent livelihood for millions and millions of honest, poor workingmen and farmers of Europe, with a prospective competence for many, and many farmers and workingmen in the Northwest could and would do better, present and future, in the sparsely settled productive State of Florida, if they would leave the overcrowded cities and districts in which they live, with so little prospect of future betterment, and emigrate to this State.

However, immigration on a large scale, if it is to be diverted from other centres of attraction, requires the official aid of the State as concerted action of corporations and individuals, and it must be started by well directed, organized effort. Then it will, undoubtedly develop itself and the broad and productive fields of the Sunny South will produce untold results and material prosperity to many thousands of poor, but respectable immigrants.

I have the honor to remain,

Yours, respectfully,

FRANCIS IRSCH,

Gen'l agent of Immigration for United States and Europe  
to the State of Florida.



## APPENDIX "C."

EXPENSES BUREAU OF IMMIGRATION.  
(Abstract of Comptroller's Warrant Book.)

		N . Warrant.	
1891.			
Feb.	4—First National Bank for N. M		
	Bowen.....	773	129 30
	E. B. Van Deman.....	774	180 80
	C. A. Choate.....	775	100 00
	Jacksonville Tel. Exchange.....	776	9 86
	5—N. M. Bowen.....	816	127 80
	7—H. Reed, Postmaster....	833	75 45
	12—E. B. Van Deman.....	887	165 53
	19—E. W. Clark.....	974	10 55
	20—Whitall, Tatum & Co.....	981	48 60
	27—Floridian Printing Company.....	1029	49 35
Mch.	2—C. A. Choate.....	1046	100 00
	John Costa.....	1047	16 00
	H. Reed, Postmaster.....	1048	99 75
	P. Mack.....	1049	15 00
	G. Willard Shear.....	1050	5 00
	3—L. B. W. for Caledonian Railway Company.....	1076	32 67
	4—First National Bank for Florida Publishing Company.....	1086	500 00
	17—E. B. Van Deman.....	1178	172 94
	C. A. Choate.....	1179	11 55
	27—Floridian Printing Company.....	1341	51 26
April	2—C. A. Choate.....	1412	100 00
	C. B. Gwynn, paid for atlas.....	1413	5 75
	John Costa.....	1422	16 00
	13—H. Reed, Postmaster.....	1836	69 90
	E. B. Van Deman.....	1837	176 60
	E. B. Van Deman.....	1838	21 95
	22—Graphic Company.....	1940	80 00
May	1—Floridian Printing Company.....	2113	53 94
	C. A. Choate.....	2114	100 00
	4—H. Reed, Postmaster.....	2142	62 32
	E. B. Van Deman.....	2143	172 25
	Whitall, Tatum & Co.....	2144	16 31
	John C. L'Engle.....	2145	3 75
	7—Julius Potsdamer.....	2197	150 00
	30—P. McMurray, Postmaster.....	2539	11 18
June	1—C. A. Choate.....	2547	100 00
	2—H. Reed, Postmaster.....	2553	68 50
	5—Floridian Printing Co.....	2620	52 10
	8—E. B. Van Deman.....	2653	161 15
	8—Ethan Allen.....	2654	64 00
	8—A. D. Basnett.....	2655	225 00
	8—Graphic Co.....	2656	130 00
	8—C. M. Fuller, agent.....	2657	136 50
	22—Floridian Printing Co.....	2917	4 00

July	1—C. A. Choate.....	3070	100 00
	6—First National Bank, for Walker, Evans & Cogswell.....	3234	27 25
	8—E. W. Clark.....	3248	4 50
	6—Floridian Printing Co.....	3249	45 52
	7—H. Reed, Postmaster.....	3297	27 00
	11—Floridian Printing Co.....	3569	1 50
1892			
Jan.	6—E. B. Van Deman.....	148	83 25
	6—Jacksonville Board of Trade.....	149	36 00
	6—A. D. Basnett.....	150	25 00—\$4,232 63

## ABSTRACT OF STATEMENT.

## OFFICE EXPENSES.

		No.		
	Tallahassee	Warrant.		
1891.				
Feb.	7—H. Reed, P. M., postage.....	833	\$75 45	
	19—E. W. Clark, paper.....	974	10 55	
March	2—J. Costa, janitor.....	1047	16 00	
	H. Reed, P. M., postage.....	1048	99 75	
April	2—C. B. Gwynn, atlas.....	1413	5 75	
	J. Costa, janitor.....	1422	16 00	
	13—H. Reed, P. M., postage.....	1836	69 90	
May	4—H. Reed, P. M., postage.....	2142	62 32	
June	1—H. Reed, P. M., postage.....	2553	68 50	
July	6—E. W. Clark, paper.....	3248	4 50	
	7—H. Reed, P. M., postage.....	3297	27 00—	\$455 72
1891.	Jacksonville.			
Feb.	4—E. B. Van Deman, porter, etc.....	774	4 55	
	Jacksonville Telephone Exchange Telephone .....	776	9 86	
	12—E. B. Van Deman, porter, etc....	887	11 40	
March	7—E. B. Van Deman, porter, etc....	1178	10 20	
April	13—E. B. Van Deman, porter, etc....	1837	10 30	
May	4—E. B. Van Deman, porter, etc....	2143	8 70	
	J. C. L'Engle, c. al.....	2145	3 75	
	30—P. E. McMurray, P. M., postage.....	2538	11 18	
June	8—E. B. Van Deman, porter, etc....	2653	10 55	
	A. D. Basnett, rent.....	2655	225 00	
1892.				
Jan.	6—E. B. Van Deman, porter, etc....	148	6 75	
	Jacksonville Board of Trade for E. B. Van Deman .....	149	36 00	
	A. D. Basnett, rent.....	150	25 00—	378 24
	Total.....			\$828 96

## TRAVELING EXPENSES

	Tallahassee.	No.		
		Warrant.		
1891.				
March	7—C. A. Choate, Ocala and return.....	1179	11 55--	11 55
1891.	Jacksonville.	No.		
		Warrant.		
Feb.	4—E. B. Van Deman, Ashville, etc....	774	26 25	
March	7—E. B. Van Deman, Tallahassee, etc....	1178	11 25	
April	3—E. B. Van Deman, Tampa, etc....	1837	11 75	
May	4—E. B. Van Deman.....	2143	10 80—	59 75
	Total.....			71 30

## SALARY ACCOUNT.

1891.	Talia' as'ee.	No. Warrant.		
Feb.	4—C. A. Choate, January.....	775	\$100 00	
March	2—C. A. Choate, February.....	1046	100 00	
April	2—C. A. Choate, March.....	1412	100 00	
May	1—C. A. Choate, April.....	2114	100 00	
June	1—C. A. Choate, May.....	2547	100 00	
July	1—C. A. Choate, June.....	3070	100 00—	600 00
1891.	Jacks v llc.	No. Warrant.		
Feb.	4—E. B. Van Deman, Dec., 1890....	774	150 00	
	12—E. B. Van Deman, January.....	887	150 00	
March	7—E. B. Van Deman, February.....	1178	150 00	
April	13—E. B. Van Deman, March.....	1837	150 00	
May	4—E. B. Van Deman, April.....	2143	150 00	
1892.				
June	8—E. B. Van Deman, May.....	2653	150 00	
Jan.	6—E. B. Van Deman, to June 15, 1891.....	148	75 90—	\$975 00
Total.....				\$1,575 00

## FURNITURE ACCOUNT.

1891.	Tallshassee.	No. Warrant.		
June	9—C. M. Fuller, agent, caligraph....	2657	\$100 00—	\$100 00

## STATIONERY ACCOUNT.

1891.		No. Warrant.		
June	8—C. M. Fuller, ag't, caligraph paper.....	2657	\$36 50	
	22—Floridian Printing Co., letter- heads.....	2917	4 00	
July	6—Walker, Evans & Cogswell, letter- heads.....	3234	27 25	
1892.				
Jan.	6—E. B. Van Deman, copy-book....	148	1 50—\$	69 25

## PRINTED MATTER ACCOUNT.

1891.		No. Warrant.		
March	4—Florida Publishing Co., Times- Union trade edition balance....	1086	\$500 00	
April	22—Graphic Co., advertising.....	1940	80 00	
June	1—Graphic Co., advertising.....	2656	130 00—\$	710 00

## FREIGHT, DRAYAGE AND EXPRESS CHARGES.

1891.		No. Warrant.		
Feb.	4—E. B. Van Deman.....	887	\$ 4 13	
March	3—L. M. B. for Caledonian Railway Company.....	1076	32 67	
	7—E. B. Van Deman.....	1178	1 49	
April	13—“.....	1837	85	
May	4—“.....	2143	60—	\$42 79

## MONTHLY BULLETIN.

Feb.	4—N. M. Bowen, Printing 10,000 December Number 1890.....	773	\$129 30
	5—N. M. Bowen, Printing 9,800 Janu- ary Number, 1891.....	816	127 80
	27—Floridian Printing Company, 6,000 February Number, 1891....	1029	49 35
March	27—Floridian Printing Company, 6,500 March Number, 1891.....	1341	51 26
May	1—Floridian Printing Company, 7,200 April Number, 1891.....	2113	53 94
June	5—Floridian Printing Company, 6,700 May Number, 1891.....	2620	52 10
July	6—Floridian Printing Company, 5,000 June Number, 1891.....	3249	45 52
July	11—Floridian Printing Company, 500 Fertilizer list.....	3469	1 50—\$ 510 77

## J. POTSDAMER, SPECIAL AGENT.

		No. Warrant.	
1891			
May	7—Expenses trip to Germany.....	2197	\$150 00—\$ 150 00

## EXHIBITS.

	Jacksonville Office	No. Warrant.	
1891.			
Feb.	20—Whitehall, Tatum & Co., glass jars.....	981	\$48 60
April	13—E. B. Van Deman, expenses.....	1837	3 70
	13—E. B. Van Deman, expenses.....	1838	21 95
May	4—Whitehall, Tatum & Co., glass jars.....	2144	16 31
June	8—Ethan Allen, labor.....	2654	64 00—\$ 154 56

## NORTHWESTERN FAIRS.

March	2—P. Mack, balance on exhibit sent to Gore.....	1049	\$15 00—\$ 15 00
-------	--	------	------------------

## OCALA EXPOSITION.

March	2—G. Willard Shear, views.....	1050	5 00—\$ 5 00
-------	--------------------------------	------	--------------

Total.....\$ 174 56

## RECAPITULATION.

## OFFICE EXPENSES.

Tallahassee .....	\$455 72	
Jacksonville .....	373 24—	\$828 96

## TRAVELING EXPENSES.

Tallahassee.....	11 55	
Jacksonville .....	59 75—	71 30

## SALARY ACCOUNT.

Tallahassee .....	600 00	
Jacksonville.....	975 00—	1,575 00

Carried forward.....\$2,475 26

*Brought forward*.....\$2,475 26

FURNITURE ACCOUNT.

Tallahassee .....	100 00	100 00
Stationery account.....	69 25	69 25
Freight, Drayage and Express Charges.....	42 79	42 79
Printed Matter Account.....	710 00	710 00
Monthly Bulletin.....	510 77	510 77
J. Potsdamer, Special Agent.....	150 00	150 00
Exhibits.....	174 56	174 56
Total.....		<u>\$4,232 63</u>

SUMMARY.

Receipts from tax, 1889.....	\$240 87	
Receipts from tax, 1890 .....	10,303 87	
Receipts from tax, 1891.....	10,817 69	
Receipts from tax, 1892.....	474 92	-21,837 35
Disbursements, 1890.....	10,536 50	
Disbursements, 1891.....	4 138 38	
Disbursements, 1892.....	144 25	-14,819 13
Balance in Fund.....		<u>\$7,018 22</u>

## FERTILIZERS.

---

Under this head there is but little to say that will not appear in the report of the State Chemist, or has not been already mentioned in my former report of two years since. The funds arising from the inspection of fertilizers, has paid the salaries of all the clerks of this department not paid from the proceeds of the sales of lands; has paid for all printing for the department of every kind; has paid the salary of the State Chemist, traveling expenses of chemist and of the inspectors of fertilizers and, since July 1, 1891, has paid all the expenses necessary to do the work which was intended to be done by the Bureau of Immigration. The salary of clerks and chemist and some of the printing should, perhaps, have been paid from other funds, but the condition of the State Treasury was such that the Department of Agriculture has borne all of its expenses without any additional burden to the taxpayers. The fertilizer law should be so amended as to have but one, or at most, two inspectors, whose salaries should be not to exceed \$1,000 or \$1,200 per annum, and traveling expenses, and there should be a good penalty for selling fertilizers without paying the tax. This tax is a light one and no dealers in reputable fertilizers complain at it.

Below is given a statement of the work of the office in this department.

Number of Inspection Labels furnished the different Fertilizer Inspectors of the State of Florida, number sold, amount of commissions and expenses paid to each inspector during the years 1891 and 1892:



## G. B. LAMAR, Jacksonville District.

No. of Inspection Labels on hand from last report.....	14,013	
No. of Inspection Labels received.....	435,000	
No. of Inspection Labels sold.....		394,440
No. of Inspection Labels mutilated and returned.....		455
No. of Inspection Labels on hand January 1, 1893.....		54,118
	<hr/> 449,013	<hr/> 449,013
Value of Inspection Labels sold \$8,288 97		
Amount of commissions received.....		\$1,903 79
Amount of expenses received.....		109 05
Number of tons Inspection Labels were furnished for		33,155.

## B. C. LANIER, Leesburg District.

No. Inspection Labels on hand from last report.....	14,741	
No. Inspection Labels received.....	75,000	
No. Inspection Labels sold.....		78,233
No. Inspection Labels on hand January 1, 1893.....		11,508
	<hr/> 89,741	<hr/> 89,741
Value of Inspection Labels sold \$2,002 88		
Amount of commissions received.....		\$801 15
Amount of expenses received.....		120 15
Number of tons Inspection Labels were received for		8,011½.

## W. R. MOORE, Welborn District.

No. Inspection Labels on hand from last report.....	7,978	
No. Inspection Labels received.....	149,340	
No. Inspection Labels sold.....		138,040
No. Inspection Labels on hand Jan. 1, 1893.....		19,278
	<hr/> 157,318	<hr/> 157,318
Value of Inspection Labels sold \$2,683 37		
Amount of commissions received.....		1,433 35
Amount of expenses received.....		255 20
Number of tons Inspection Labels were furnished for		10,733½.

## W. I. VASON, Tallahassee District.

No. Inspection Labels received.....	88,143	
No. Inspection Labels sold.....		88,143
<hr/>		
Value of Inspection Labels sold \$1,822 50		
Amount of commissions received.....		\$756 90
Amount of expenses received.....		53 00
Number of tons Inspection Labels were furnished for 7,290.		

## W. C. JONES, Pensacola District.

No. Inspection Labels on hand from last report .....	5,630	
No. Inspection Labels received.....	70,000	
No. Inspection Labels sold.....		70,024
No. Inspection Labels on hand January 1, 1893.....		5,606
<hr/>		<hr/>
	75,630	75,630
Value of Inspection Labels sold \$1,515 70.		
Amount of commissions received.....		\$606 26
Amount of expenses received.....		35 64
Number of tons Inspection Labels were furnished for 6,062½.		

## E. D. MITCHELL, Tampa District.

No. Inspection Labels on hand from last report .....	2,850	
No. Inspection Labels received.....	5,000	
No. Inspection Labels sold.....		4,996
No. Inspection Labels returned to Commissioner .....		2,854
<hr/>		<hr/>
	7,850	7,850
Value of Inspection Labels sold \$77 34.		
Amount of commissions received.....		\$30 91
Amount of expenses received.....		55 50
No of tonns Inspection Labels were furnished for 308.96.		

Mr. Mitchell resigned as Inspector last October, returned all unsold tags, all blanks, etc., and was settled with in full. No one has been appointed to succeed him.

## SOLD BY COMMISSIONER OF AGRICULTURE.

Value of Inspection Labels sold \$1,793 86.		
No. of Inspection Labels sold .....		75,198
Number of tons Labels were furnished for 7,173.33.		
Special Analyses fees received by State Chemist.....		\$52 00

## GRAND TOTAL.

Total number of tons fertilizer reported as inspected	72,734.79
Total amount of tax received on same	\$18,184 12
Total amount of special analysis fees..	52 00
Amount of cash on hand from last report	832 05
Amount of commissions paid to inspectors.....	\$5,532.36
Amount of expenses paid to inspectors..	628 54
Amount of salary of State Chemist....	4,000 00
Amount of expenses which includes cost of chemicals and apparatus for laboratory, printing, labels, blanks, furniture, postage stamps, freight and express charges, clerk hire, etc., etc., as shown by general statement of this report....	8,128 07
Balance cash on hand.....	779 20
	<hr/>
	\$19,068 17    \$19,068 17

GENERAL STATEMENT of Funds Received and Expended  
Arising from the Inspection of Fertilizers during the Years  
1891 and 1892 :

To amount brought forward from last report .....	\$ 832 05	
To amount deposited with State Treasurer by Inspector G. B. Lamar ...	8,288 97	
To amount deposited with State Treasurer by Inspector B. C. Lanier ...	2,002 88	
To amount deposited with State Treasurer by Inspector W. R. Moore....	2,683 37	
To amount deposited with State Treasurer by Inspector W. I. Vason....	1,822 50	
To amount deposited with State Treasurer by Inspector E. D. Mitchell...	77 34	
To amount deposited with State Treasurer by Inspector W. C. Jones....	1,515 70	
To amount deposited with State Treasurer by Commissioner.....	1,793 36	
To amount deposited with State Treasurer as special analysis fees.....	52 00	
By amount commissions paid Inspector G. B. Lamar .....		\$ 1,903 79
By amount expenses paid Inspector G. B. Lamar .....		109 05
	<hr/>	<hr/>
Carried forward .....	\$19,068 17	\$2,012 84

<i>Brought forward</i> .....	\$19,068 17	\$2,012 84
By amount commissions paid Inspector B. C. Lanier.....		801 15
By amount expenses paid Inspector B. C. Lanier .....		120 15
By amount commissions paid Inspector W. R. Moore.....		1,433 35
By amount expenses paid Inspector W. R. Moore.....		255 20
By amount commissions paid Inspector W. I. Vason.....		756 90
By amount expenses paid Inspector W. I. Vason.....		53 00
By amount commissions paid Inspector W. C. Jones.....		606 26
By amount expenses paid Inspector W. C. Jones.....		35 64
By amount commissions paid Inspector E. D. Mitchell.....		30 91
By amount expenses paid Inspector E. D. Mitchell.....		55 50
By amount salary paid State Chemist.....		4,000 00
By amount salary paid H. S. Elliott..		1,550 00
By amount salary paid L. A. Perkins.....		1,540 00
By amount salary paid John T. Costa..		571 00
By amount salary paid W. G. Powell...		742 50
By amount salary paid E. G. Cheley..		104 20
By amount paid for postage stamps..		852 37
By amount paid for Laboratory chemicals.....		172 73
By amount paid for expenses of Laboratory .....		138 89
By amount paid for gas for Laboratory.		69 25
By amount paid for inspection labels and tags.....		295 75
By amount paid for freight and express charges on agricultural statistics, fertilizers, &c.....		126 25
By amount paid on order Frank Phillips, commissions for 1890....		33 00
By amount paid for telegrams.....		3 30
By amount paid expenses of State Chemist in collecting soils for analysis in the counties of Alachua, Marion, Orange, Osceola, Hernando, Dade and Brevard.....		66 07
<i>Carried forward</i> .....	\$19,068 17	\$16,426 21

<i>Brought forward</i> .....	\$19,068 17	\$16,426 21
By amount for printing "Monthly Bulletins" ..		668 43
By amount paid for printing report of Commissioner of Agriculture for the years 1889 and 1890.....		577 60
By amount paid for tobacco seed for free distribution.....		73 00
By amount paid for work on agricul- tural statistics.....		155 65
By amount paid for chemical books for Laboratory.....		26 48
By amount expenses of State Chemist attending meeting of national chemists, August, 1891.....		79 05
By amount expenses of State Chemist attending meeting of national chemists, August, 1892.....		99 73
By amount paid for Geological Reports		5 00
By amount paid for stove for Labora- tory .....		15 35
By amount paid for neostyle material,		42 17
By amount paid for office furniture...		108 30
By amount paid for blanks for de- partment.....		12 00
By balance cash on hand Decem- ber 31, 1892.....		779 20
	<hr/>	<hr/>
	\$19,068 17	\$19,068 17

# Report of the State Chemist.

---

To His Excellency, Governor FRANCIS P. FLEMING :

In accordance with the requirements of Section 12 of the act to provide for the appointment of a State Chemist and Inspectors of Fertilizers, I herewith submit my third annual report :

As the operations of the fertilizer law and the work of the State Chemist have been frequently referred to and explained in the Monthly Bulletin, published by the Department of Agriculture, it is not now deemed necessary to give more than a brief recapitulation thereof. The policy of making an annual analysis of as many as possible of the fertilizers sold in the State has been continued. While this involves a great amount of work and is not contemplated or required by our present law, it is believed to be distinctly in the interests of the people and of the manufacturers of the better grades of goods as well. So long as it is understood that all fertilizers are subject to this annual analytical review, there is but little chance for dishonest goods to obtain a foothold. Under such conditions the risk of detection is too great, and therefore it is but little attempted. Any relaxation, however, in this vigilant annual inspection would be likely to result in carelessly compounded if not in absolutely fraudulent goods finding a place upon the market, and therefore the writer has spared neither time nor labor in the prosecution of what he believes to be an eminently wise and protective, though not legally required work.

The number of fertilizer analyses made during the current year is 131, all of which, as they were made, have been published in the Monthly Bulletin and reappear in subsequent pages of this report.

It will be observed of the samples analyzed that ninety-three were furnished by the inspectors and thirty-eight by



the manufacturers themselves. The analyses of these latter samples are not contemplated by our present fertilizer law and was only undertaken as a temporary expedient to remedy as far as possible what is believed to be a grave defect in that law. In the opinion of the writer samples of fertilizers should always be taken by a perfectly disinterested party, who should be an expert in this work and from goods already upon the market, and whenever practicable from goods which have passed into the hands of consumers. As the law at present stands the six inspectors of fertilizers are stationed at widely distant points in various portions of the State. So far as the writer is advised they have faithfully collected and forwarded samples that came under their notice, and sometimes at great personal inconvenience, have endeavored as fully as practicable to meet the requirements of the law. But Florida is a very large state, and it naturally follows that a great many brands of fertilizers are sold at points very distant from their offices, and of whose sale they have no means of knowing. Our present fertilizer law makes no provision for the traveling expenses of inspectors, and the Board of Agriculture while inclined to pursue a liberal policy when a considerable number of brands of fertilizers could only be reached in this way, have naturally been very conservative in making such expenditures in the absence of specific legal authority therefor.

The only practicable way of even partially remedying this defect in the law was, as it seemed to the writer, to permit the manufacturers themselves to furnish fair samples of their goods and to publish an analysis of the same in a separate table, distinctly stating at the same time that such samples were furnished not by the inspectors, but by the manufacturers themselves. It is hoped that the coming Legislature will see the wisdom of so amending our present law that all samples shall be taken by an inspector who is authorized to travel over the State for that specific purpose, and whose special business it shall be to take, by the most approved methods, fair samples of all fertilizers legally on sale in the State.

In addition to these 131 analyses above referred to there

have been made, since my last published Report, twenty-six special analyses for consumers, which have been referred to the Commissioner of Agriculture, and the fees for which have been turned over to the Treasurer of the State. In some instances a number of analyses have been made for the same individual. The following are the names of the citizens of the State for whom these analyses have been made: Thomas Jewell, Tangerine, Fla.; J. L. Brown, Orlando; H. L. DeForest. Sanford; Fred. P. Sefner, Sefner; Frank H. Davis, Apopka; M. F. Robinson, Sanford; John B. Beach, Melbourne, Fla., J. E. Gannon, Marianna; John A. Merriday, Palatka; J. T. Galloway, Okahumpka; M. O. Markham, Sanford; A. Munroe, McMeekin; Barth Edwards & Co., Bartow; T. Johnson; Leesburg; Cowles & Jordan, Bartow.

#### EXAMINATION OF PHOSPHATES AND OTHER MINERALS.

The policy of gratuitously examining and reporting upon the various mineral specimens which the active vigilance of "phosphate hunters" and others has brought to light has been continued. This kind of work, while entirely outside of the legitimate duties of his office, has nevertheless been cheerfully undertaken. Three hundred and sixty samples of "phosphate," kaolin, clay, gypsum, magnesite, ores of iron, Manganese, etc., have thus during the year been examined, often very hurriedly, and reported upon to the persons sending them. It is much to be regretted that a State Geological Bureau has not been organized to take advantage of and classify these interesting "finds." Important industrial interests might be greatly aided by the researches of a competent State Geologist, and it is hoped that Florida will soon have the advantage of such an expert scientist in the development of the vast mineral wealth which the past three or four years have so unexpectedly revealed.

The exploration of the phosphate regions of the State while not perhaps attended with the excitement which characterized the earlier discoveries, has nevertheless during the year added largely to the number of known and workable beds. Speculation and inflated valuations have given place to

more conservative views. A large number of expensive plants both for mining and washing and otherwise preparing the phosphate in its various forms for market have been erected, and the coming year promises to see a large increase of the output, both of land and pebble phosphate. It seems to be conceded that Florida has the advantage over any portion of the world both in the richness and extent of its phosphate deposits, and in the ease and cheapness with which they can be mined and placed upon the market. Indeed, this very conviction which has forced itself upon the commercial world, added to crude methods of preparation of products, unwise and ruinous competition and other preliminary difficulties incident to the organization of this new and vast industry, have so depressed prices that they have fallen to a lower level than was ever before known. It is hardly to be expected, however, that this condition of things can be permanent.

It may not be amiss to mention that the writer has good reason to believe that the superficial deposits of phosphates in Florida, vast and rich as they are known to be, are but a small proportion of the phosphate wealth of the State. Something like three years since the writer made and published the discovery that somewhere underneath the town of Orlando, in Orange county, there was a deep bed of pebble phosphate. The discovery was made in the casual examination of some mixed borings from an artesian well that was sunk in that place to the depth of four or five hundred feet. Nearly one-third of the "mixed material" sent to the writer, proved to be identical in appearance, character and composition with the "Peace creek pebble phosphate." As no data were then obtainable as to the exact depth at which this deposit occurred the facts were published with the suggestion that there was "a possibility that only a pocket of pebble phosphate had been reached," but that the more reasonable supposition was that a bed of pebble phosphate existed underlying that particular region and whose extent and depth only subsequent investigation could disclose. Since then the evidence has been cumulative that this bed extends over a vast area. An artesian well recently bored at the ice factory in Orlando at a

distance of about one-half mile from the first gave a good deal more definite information than the first. In the case of the second well I am informed that the bed of pebble phosphate was struck at a depth of about one hundred and twenty-five feet, and proved to be of about twenty-five feet in thickness. Nearly the same conditions were found at Winter Park and at Sanford, though I think in the latter town the bed was reached at a somewhat lower depth. I am advised that the same bed has been struck as far north as Palatka and within the past week a gentleman who has recently been boring wells in Manatee county in the extreme southern part of the State informs me that in every instance he has passed through this same bed of pebble phosphate, at a depth, I believe, of about 300 feet. The evidence I think, therefore, more than justifies my conclusions, first published three years since, and gives the world a reasonable assurance whenever these easily worked surface deposits give out, if they ever do, that Florida still has a reserve bed of phosphate which is practically inexhaustible, which will be mined just as coal is mined, and which probably underlies from one-third to one-half of the State. Of course it may be urged that we have as yet no proof of the existence of this bed except in the immediate vicinity of the borings that have revealed its presence and that it is too early to generalize in a matter where many of the geological conditions are as yet imperfectly understood. While conceding the wisdom of caution in accepting the remarkable conclusions above indicated, the writer may be pardoned for assuming as a certain and ascertained fact in widely separated localities, and a reasonable probability in intermediate regions, the existence of this deep lying and inexhaustible bed of pebble phosphate.

#### SOFT PHOSPHATES.

The past year has witnessed a great advance in the development of these singular beds of phosphatic material. These deposits are unique in the history of phosphates, and in some respects are the most remarkable of any hitherto found. The obvious difference between these and all previously known beds of phosphates is that nature has here done the grinding.

Indeed, in many instances a considerable portion of these "soft phosphates" is in a more thoroughly powdered condition than it is possible to artificially produce. The finer portions are comparable only to clay, and pass so readily through the best Swedish filters (Schlicher & Shuels') that it is exceedingly difficult to separate the water when once mixed with it except by prolonged sedimentation. Even the coarse portions of these phosphates are usually so soft and pulverulent that only the simplest machinery is required to reduce them to powder. In this phosphatic material, therefore, one of the largest elements of the cost of preparation has been eliminated, and, as it often occurs in superficial beds of great extent and depth, it can be mined and sold at prices far below that of any known material of equal fineness and richness in phosphoric acid.

#### AVAILABILITY AS PLANT FOOD.

In expressing any opinion on this subject, the writer desires to speak with great caution and conservatism. It must be remembered that this is in many respects a new material and that the questions connected with its profitable use are equally new and to a certain extent unsolved. Among the agricultural chemists of the world a method of estimating "available" phosphoric acid has gradually come into use which is not altogether satisfactory, but which in our present state of knowledge of the intimate chemistry of plant life, is the best that has been devised. So far as artificially prepared "super-phosphates" are concerned, and the forms in which phosphoric acid is found in ordinary commercial fertilizers, the official method which assumes that the portion immediately soluble in water and in neutral citrate ammonia are alone and at once "available" as plant food, while open to the objection that there is the widest contrast between the methods the laboratory of nature and those which modern chemistry employs, is nevertheless a fairly approximate basis for the estimation of values and may be considered sufficiently accurate for commercial uses. In the instance of a new material like this "soft phosphate" its friends, at least as a preliminary plea,



are fairly entitled to the benefit of any doubt that may arise from the inadequacy and imperfections of our present methods in determining "available" phosphoric acid, especially when that term is understood as synonymous with "assimilable" as plant food.

#### CHEMICALLY CONSIDERED.

From a chemical standpoint, soft phosphate does not differ from many of the more compact varieties of that mineral. Its difference seems to be chiefly, if not exclusively, physical. The percentage of phosphoric acid present varies between pretty wide limits. As low as 16 per cent. has been found in some goods upon the market, while more than twice that has been found in selected samples sent for analysis. This material treated in the ordinary manner gives from  $\frac{3}{4}$  to, in some very exceptional cases, as high as 3 per cent. of water soluble and ammonia citrate soluble phosphoric acid. The percentage of the acid originally present, together with the fineness to which the material is ground, seems to largely determine the result.

In order to test the continued action of soil water upon this material the following experiment was made: One gramme ( $15\frac{1}{2}$  grains) of a soft phosphate containing a little more than 24 per cent. of total phosphoric acid, about 4 per cent. of which was in the form of ferric and aluminic phosphate, was on the 20th of July last ground to an impalpable powder and placed in a closed vessel with 100 c. c. (about four ounces) of rainwater, which was quite highly colored by filtering it through a stratum of oak leaves, and was about the best imitation of the natural waters of the soil that I could readily procure. After one month's time .43 of 1 per cent. was found to have been dissolved. To the undissolved portion 200 c. c., or double the amount of similar rainwater, was again added, and it was allowed to stand two months, or double the time. The water was again examined and was found to have taken up .29 of 1 per cent., or .72 per cent. in all. This would indicate that the solvent action of such rainwater containing vegetable "extractive matter" is continuous, but rapidly diminishing in intensity. As this soft



phosphate under the usual tests gave about  $1\frac{1}{4}$  per cent. of "available" acid, it would seem probable, had the experiment continued for three or four months longer, that the total solvent power of such "soil water," acting continually for six or eight months, would not have differed greatly from that of neutral citrate of ammonia under the usual conditions. But "soil water," with its dissolved "vegetable extracts," carbonic acid, etc., is not the only agent which is concerned in the solution and assimilation of phosphoric acids in the soil. The roots of plants possess a distinct solvent power, partly due, no doubt, to oxalic and possibly other acids secreted by the plant, partly to nitrifying ferments, which, through their products, directly attack basic phosphates with the consequent liberation of phosphoric acids, and partly, perhaps, to other obscure reactions which the older physiologists were accustomed to group together under the general name of "vital force." All this furnishes an unknown and varying field for the operation of nature's solvents, which no chemist can beforehand determine and no mere laboratory work can measure. So that beyond the amount of "available" phosphoric acid as estimated by the chemist, there is an unknown margin of *possibly* available material which the intimate chemistry of nature may be able to find in "soft phosphate" to appropriate to its needs and uses.

Taking, however, the lowest chemical estimate of the "available" phosphoric acid in these soft phosphates to be the true one it does not follow that its purchase is necessarily an unwise investment. If the consumer can say to himself "here is a material that (to take for example one of the better grades of soft phosphates) contains an average of twenty-four pounds in a hundred of phosphoric acid of which at least one pound each year will be liberated as plant food," he would have a definite basis of estimate. This, as the writer believes, is a very safe and conservative estimate. In that case he might very properly ask "would it not be better and in the end more economical to purchase at once and at a low price enough of this essential element to last ten or fifteen years and trust to nature to do the dissolving rather

than each year to pay three or four times as much for the artificially dissolved product? Unless we are to totally discredit the testimony of many who have used this material it would seem that at least in some cases this question should be answered in the affirmative. Unfortunately, sure and trustworthy information is here much less abundant than the general public could desire. Naturally this is the case in so new an industry. Still it is not the chemist but the agriculturist that must supply this needed evidence. In other words the laboratory of nature must be diligently and perseveringly questioned and from its decision, fairly rendered, there can be no appeal.

#### PRACTICAL SUGGESTIONS.

A few practical suggestions to orange growers and others who may desire to test this new product may not be out of place. First, go slow. A carefully conducted experiment on a small scale made this year may greatly assist in deciding what may be profitable for the next. It is well to remember: First—That soft phosphate is not a complete fertilizer, and that it contains only one of the three prominent elements needed in plant life. Second—That the solubility of soft phosphate is probably influenced largely by soil and other conditions which it is impossible to determine beforehand, and Third—That a great many soils in the State already contain all the phosphoric acid that is needed or will be needed for years to come. In making the experiment, in a grove for instance, something like the following plan should be pursued: Let two rows of trees of similar size, age and previous history, so far as fertilizer is concerned, be selected. To the one let a liberal application of soft phosphate be made with a sufficient amount of nitrogen and potash. To the other let the same amount of nitrogen and potash be given without the soft phosphate. It is of course essential in such an experiment that the nitrogen should be in this case derived from some substance entirely free from phosphoric acid. Substances like bone, fish scrap, tankage, cotton seed meal, and all other animal and vegetable materials are obviously inadmissible. Nitrate of soda or sulphate of ammonia must be used or

the experiment would have little or no value. Potash should be in the form of sulphate. Now, if at the end of a year's time with identical care and culture, the row of trees that was fed with soft phosphate showed better results than the one that did without it, it might be safely assumed, for this particular grove, that soft phosphate was a good thing to buy and apply. Of course any other tree or crop may be made the subject of the experiment, observing the same plan and conditions.

#### A SUGGESTION TO OWNERS OF SOFT PHOSPHATE MINES.

Perhaps the "soft phosphate" men will pardon me a modest suggestion or two. Assuming that even one-half of what is now claimed by its friends for this new material shall prove to be true, they have a most valuable product, and one that will find an almost unlimited field of usefulness. The writer believes, however, that the great ultimate market for these phosphates is *not Florida*. Naturally the home market is the first to be cultivated and reached. The same conditions, however, which have given to Florida the most extensive known deposits of phosphate have more or less obtained all over the State. The soil itself has to no inconsiderable extent been a beneficiary in the liberal and widespread distribution of this essential element of plant food. In our Florida soils potash is almost universally needed, nitrogen generally, and phosphoric acid *sometimes*. But outside of Florida there is a world that is waiting for cheap phosphate. Millions of acres of otherwise fertile soil in the Eastern, Northern and Western States are now either abandoned or on the point of being abandoned simply because the meagre original supply of phosphoric acid has been carried away to Eastern cities or to Europe in the form of hay, and wheat, and corn, and oats, and rye, and barley, in beef and mutton and other food and cereal products. Even California orange-growers find that the first and most pressing need of their soil is phosphates. A good part of Europe is practically in the same phosphate poverty-stricken condition. This state of things is certain to increase in a rapid ratio as time goes on and population multiplies. Now if, without the expense of grinding and acid treatment,

our Florida miners of "soft phosphate" can furnish the world at a cost of half what it has previously been paying, this "missing link" in the chain of profitable crop and food production, it will at once be seen what a boon to the world these soft phosphates may become, and what an illimitable field there is for their future profitable distribution. Of course there are questions of transportation and others to be equitably adjusted, which may take years to accomplish. But the interests involved are too vast to permit any obstacles, however great, to perniciously oppose the utilization of what nature herself seems to have specially prepared for the rejuvenescence of declining agriculture in so many of the older portions of the world.

In all that has been said above the writer must not be understood as entertaining the belief that these soft phosphates are at once or at any time in the future to take the place of acidulated phosphates in the fertilizer trade. The former have their place to win, the latter have an already assured place in the commerce and agriculture of the world. As has before been intimated, save in the important matter of physical condition, judging from his own laboratory work, he sees no reason to believe that these Florida soft phosphates differ in essential character or chemical composition from South Carolina "floats" or any other finely ground phosphate material of medium grade. There have been earnest advocates for the use of these latter goods and to a limited extent these "floats" find a market in their crude state. But for immediate results, and for quick growing annual crops, acidulated goods are not likely to be soon supplanted. Indeed as the supply of high grade superphosphates increases and the cost of production diminishes, both of which the hard rock and pebble phosphates of Florida render possible, it is reasonable to suppose that the future will show a marked and steady increase in the consumption of this latter product. The writer has simply desired to state fairly and fully all that could be reasonably claimed by the friends of soft phosphates. In this case, however, the agricultural world and not the chemists, will be judge and jury and court of appeals com-



bined, and nothing that the writer could say or leave unsaid would be likely to in anywise modify or influence the final result.

#### SOIL ANALYSIS.

In addition to the regular duties of his office, the writer, during the past year, has done a good deal of work in soil analysis. This has been undertaken, not because the law requires or contemplates it, but simply because in the view of the writer it is a much needed work, and one that if followed up will be of great benefit to the agricultural and fruit-growing interests of the State. All intelligent cultivation of the soil presupposes a more or less complete knowledge of the soil constituents, and without this, methods of culture and fertilization both are necessarily more or less uncertain and empirical. Very little comparatively has yet been done in this vast field, but no little interest has been aroused in the subject and a beginning made, and it is hoped that some arrangement can be effected either through the State laboratory or some other way for the continuation of this important work.

The first analytical soil determinations were made to throw some light if possible upon the origin of so-called "Die-back" in two well-known groves. As the analysis made had special reference to the inquiry in question, they differ somewhat from a number subsequently made. In the following tables air-dried "soil" is the basis of the estimate. The total nitrogen was not estimated, neither was the soluble "silica," soluble in sodium carbonate, both important determinations, which would have been made had the writer anticipated the scope and direction which his investigations have subsequently taken. In the following tables soil No. 1 is surface soil from the grove of Cyrus W. Butler, St. Petersburg, Florida, taken from a mound in an old grove where the trees were badly affected with "Die-back." No. 2 surface soil from a young grove recovering from a slight attack of the same trouble and belonging to the same gentleman. No. 3 is surface soil from a portion of the grove of Mr. D. R. Northy,

of Orange Bend, where the disease was manifesting itself. No. 4, the subsoil taken in the same locality at a depth of eighteen inches, and No. 5 the subsoil at the depth of four feet.

	Soils from Grove of Cyrus W. Butler, St. Petersburg, Fla		Soils from Grove of D R. Northey, of Orange Bend, Fla.		
	No. 1.	No. 2	No. 3	No. 4	No. 5.
Acid insoluble silica and silicates.....	95.3600	96.4600	88.2925 .0385	67.8200 .3200	68.0750 2161
Acid soluble silica	.2400	.2100			
Acid soluble alumina ( $Al_2O_3$ ).....	.6100	.5800			
Acid soluble ferric oxide ( $Fe_2O_3$ )....	.6800	.7000	} 3.750	17.2000	16.0810
Acid soluble calcium oxide ( $CaO$ )..	.2800	.2100			
Acid soluble magnesium oxide ( $MgO$ ).....	.0800	.1000	.3069	.6176	.9094
Acid soluble potassium oxide ( $K_2O$ )..	.0081	.0145	.0186	.5530	.3890
Acid soluble sodium oxide ( $Na_2O$ )..	.0104	.0128	.1065	.1430	.1400
Acid soluble phosphoric acid ( $P_2O_5$ ).....	.1630	.1368	.....	.....	.....
Sulphuric acid and chlorine: not estimated: hygroscopic moisture...	.1324	.1324	1260		.0960
Carbon, free and combined, nitrogen, oxygen, carbonic acid, &c., and loss.....	.6400	.4300	2.7500	6.1231	6.1000
	2.0285	1.2450	4.6046	7.0973	7.9936
	100	100	100	100	100

As the results of these analyses were quite fully discussed in the Monthly Bulletin at the time they were made, it is not deemed necessary to now consider them, except in the briefest form. While it was conceded that obscure causes, which chemical analysis does not reveal may have induced the diseased condition of these groves, it was suggested in the case of Mr. Butler's grove that the "die back" probably came from the fact that from drainage, or other causes, the original meagre supply of potash had been reduced much below the limit of healthy growth, while in the case of Mr. Northey's grove, when the soil is a stiff, compact, impervious clay, but contain-



ing an abundance of all elements necessary for plant nutrition it was suggested that the trouble probably came from the mechanical condition of the soil, and that not more food but more air, in other words better drainage was the real need which his trees, with their dying branches, were mutely striving to express.

In the case of Mr. Butler's grove an effort was made by a partial analysis of several subsoils to trace the probable influence of cultivation and drainage upon the nitrogen, phosphoric acid, and potash present. While the analyses given are too limited in number and time to justify positive conclusions, it is apparent that soil No. 1, for some reason, shows great surface exhaustion in potash and a notable increase in phosphoric acid and nitrogen. Soil No. 2 shows a slight tendency in the same direction, while Virgin soil No. 3 probably not unfairly represents the original constitution of the other two soils and subsoils.

SURFACE SOIL, NO. 1.			SUB SOIL, NO. 1.		
From surface to 1 foot below.			From 2 to 3 feet below surface.		
	Acid soluble per cent.	Water soluble per cent.		Acid soluble per cent.	Water soluble per cent.
Phosphoric acid...	.1630	.0971	Phosphoric acid...	.1287	.0021
Potash.....	.0081	.0010	Potash.....	.0147	.0018
Nitrogen.....		.016	Nitrogen.....		.0014
SURFACE SOIL, NO. 2.			SUB SOIL, NO. 2.		
From surface to 1 foot below.			From 2 to 3 feet below surface.		
	Acid soluble per cent.	Water soluble per cent.		Acid soluble per cent.	Water soluble per cent.
Phosphoric acid...	.1368	.0046	Phosphoric acid...	.1446	.0022
Potash.....	.0145	.0039	Potash.....	.0158	.0016
Nitrogen.....		.0013	Nitrogen.....		.0012
SURFACE VIRGIN SOIL, NO. 3.			SUB SOIL OF VIRGIN SOIL, NO. 6.		
From surface to 1 foot below.			From 2 to 3 feet below surface.		
	Acid soluble per cent.	Water soluble per cent.		Acid soluble per cent.	Water soluble per cent.
Phosphoric Acid...	.1286	.0033	Phosphoric acid...	.1406	.0031
Potash.....	.0216	.0006	Potash.....	.0200	.0012
Nitrogen.....		.0009	Nitrogen.....		.0008

About a year since it was decided to undertake a series of experiments to determine if possible a little more definitely than is now known the precise influence exerted by certain

soil constituents in fixing and retaining the three principal fertilizing elements, nitrogen, potash and phosphoric acid. As the questions involved are both difficult and greatly complicated the most that was hoped from these investigations was some slight contributions to existing knowledge. It was believed, however, that by attacking the problem from a new direction, there was at least a reasonable expectation that additional facts might be gathered which will aid in its ultimate solution.

In describing the experiments already made the writer is compelled to make use more or less of technical terms. He will endeavor to make at least the results plain to the ordinary reader.

#### EXPERIMENTS WITH PURE SAND.

As silica or quartz, (sand) is the foundation on which most soils are built, this material was the first one selected for investigation. To obtain this "sand" in a chemically pure state, the following method was employed: Some fine "scrub" sand was obtained from South Florida, which a casual observer would have pronounced "pure," but which under the microscope showed traces of clay, iron oxide, vegetable matter, etc. This was first, thoroughly washed through some twenty waters until a sample under the microscope showed no traces of admixture with foreign matter. This purified sand was then digested for twenty-four hours in strong nitric acid, the acid washed away and the sand finally subjected to a red heat.

As the size of the grains of this sand might prove an important factor in determining the results, the following measurements were made. It is a matter of regret that the writer has no sieves with accurately measured circular openings, and that the sieves made for ordinary fertilizer work were used. This sand all passed readily through a 40-mesh sieve, and 69.95 per cent. passed through a 60-mesh, 27.04 was left on an 80 mesh, 24.16 was left on a 120-mesh, and 18.40 passed through.

It was first intended to make use of large glass tubes for the work, but these so uniformly broke upon trial that tubes made of tin and thoroughly coated on the inside with para-

fine were finally substituted in their stead. These tubes were made  $3\frac{1}{2}$  feet in length and  $1\frac{1}{2}$  inches diameter, rapidly narrowed at the bottom to an opening,  $\frac{1}{8}$ -inch orifice, which was stopped by a loosely inserted plug of filter paper. Into each of these tubes was then poured 1100 c.c. of this purified sand, and the tubes were then placed with the narrow orifice of each inserted in a empty glass bottle, of about 2 liters capacity (about half a gallon) and the tubes fixed perpendicularly in a substantial frame. The sand in each was then thoroughly moistened with distilled water and allowed to stand for three day's time.

In the meantime solutions of potash salts were prepared as follows: Carbonate of potash from wood ashes; "muriate of potash" (potassium chloride) from the ordinary salt, and sulphate of potash, also from the high grade of salt. These solutions were prepared as accurately as practicable without special care, so that each c.c. should correspond to 1 milligramme of actual potash present. Upon the sand of the first tube there was poured 50 c.c. (not quite two fluid ounces) or approximately 50 millegrammes (not quite one grain) of actual potash from the carbonate thus obtained, and the same amount respectively of "muriate" and "sulphate" was poured upon the sand of the other two tubes. The object of all this was to test the question whether pure sand had *any influence* in holding up, fixing or retaining any of the ordinary forms of potash that are used as fertilizers.

These tubes were kept carefully covered, and to imitate as closely as possible the conditions obtaining in nature, every few days distilled water, an ounce or two at a time, was poured into each of these tubes. This experiment was carried on in this manner for about six months. At the end of that time it was found that about  $1\frac{1}{2}$  litres of water had passed through the sand in each tube, and was of course found in the bottle underneath. The drainage water in each case was carefully evaporated and the potash found therein determined. At the same time a parallel determination of the potash in 50 c.c. of the original solution, which had been kept hermetically sealed, was made and the results compared.

The following in brief is the result of the determinations, which were made with exceeding care: First tube with carbonate of potash, 50 c. c. original solution, gave 50.104 milligrammes of  $K_2O$ . Drainage gave 48.270 milligrammes of  $K_2O$ ; left in tube: 1.834 milligrammes. Second tube, "muriate" of potash, solution 50 c. c., gave 50.200  $K_2O$ . Drainage 48.173  $K_2O$ ; left in tube 2.827 milligrammes. Third tube, sulphate of potash, 50 c. c., gave 50.590 milligrammes  $K_2O$ . Drainage 48.076; left in tube 2.314 milligrammes. To recover as much as possible of this portion "left in the tubes," the sand in each case was emptied out and two litres of water poured over it. One litre of this was evaporated and double the amount of potash there found was credited to each tube. In this way 1.362 milligrammes was recovered from the first tube, 1.470 milligrammes from the second and 1.820 from the third. It will be seen that of the 6.975 milligrammes of potash not accounted for in the drainage, 4.552 milligrammes were simply held by the retained moisture in the sand, and only two and one-half milligrammes, *less than one twenty-sixth of a grain of potash*, was actually held up or in any way retained by this chemically pure sand of the three tubes. It is more than likely that even this minute quantity of loss may be more reasonably attributed to errors in the estimate, and that we are perfectly safe in concluding that pure quartz sand has absolutely no power to hold up or retain either carbonate, "muriate" or sulphate of potash, and that a solution of it passes through such sand by natural drainage with the same facility as water itself.

The writer hopes to continue these experiments with various combinations of such purified sand with clay, oxide of iron, humus, etc. Although an extended series of such tests will involve no end of labor and time, it is believed that it is only in some such way that many of the most important questions affecting the profitable fertilization and culture of the siliceous soils of our State can be practically solved. When we know not only the chemical composition of our soils but precisely what and how much each soil constituent will hold up and retain the soluble potash, nitrogen and phos-



phoric acid that at so much cost of money and time we are applying, we shall be in a position to fertilize more wisely and cultivate more successfully these certainly hungry and presumably "leaky" soils.

#### FLORIDA SOILS FOR THE COLUMBIAN EXPOSITION.

Something over six months since the writer was requested by Dr. Hilgard, of the University of California, to prepare a soil exhibit of the State of Florida for the coming Columbian Exposition at Chicago. As the preparation of this exhibit involved no little labor, and the duties of his office were already sufficiently burdensome and exacting, it was at first considered impracticable to accede to the request. Moreover, while the work of the writer, if undertaken would be gratuitous and done with the single view of thereby benefiting the State, there were some necessary expenses attendant thereon in the collection of soils the preparation of suitable boxes for the exhibition of the same, transportation, etc., which must be met, and it was not quite plain where the money was to come from to meet even these comparatively insignificant charges. After consultation with Governor Fleming and the Commissioner of Agriculture, who were fully alive to the importance of the proposed exhibit, and who believed themselves justified in assuming the responsibility of the financial side of the question, the writer decided to reconsider his first determination and to undertake the work.

It was believed that the services of public-spirited citizens in various portions of the State could be readily secured for the work of collecting soils for analysis and for exhibition. By the gratuitous efforts of individuals, a good deal of important work could thus be secured with no expense to anybody. It seemed not unreasonable to expect that very few men, especially when personally appealed to, would refuse or neglect to give the few hours of time requested for this important public service to the community and the State.

A preliminary question had of course to be decided, and that was the particular localities from which these soil samples were to be taken. Florida is a large State, presenting

even in the midst of a certain general resemblance great diversity in character and composition of its soils. The investigations hitherto made have been local, and frequently partial and imperfect. Nothing even approaching completeness in the form of a soil map has ever been published, or in the present state of knowledge is possible. In the proposed exhibit only fifteen samples are allowed to each State, and how to fairly apportion these samples over this wide territory so as to illustrate typical soils, and at the same time keep in view their adaptation to various crops and fruits that are more or less peculiar to Florida, was a practical question which it was far easier to ask than to answer.

After due consideration I thought it best to give special prominence to the latter of these objects, and it was decided to request some prominent citizen in each county selected to collect and send a sample of typical soil which, in the judgment of competent persons, was especially adapted to the growth of some particular crop or fruit. Of course soils thus selected would be adapted to many purposes other than the particular one designated, but it is fair to presume that the analysis of these samples will throw some light upon the composition of soils best fitted to the production of specific fruits and crops, and will, at the same time, be a not unimportant contribution to our knowledge of the soil and soil constituents of the whole State.

To secure uniformity in the samples as well as the methods of collection a circular giving special directions in the matter was sent out to prominent citizens in the below named counties. As the method of collecting the soil for the exhibit requires some considerable skill and experience on the part of the collector, it was found difficult to convey in this manner the requisite technical instructions. The writer, therefore, found it necessary to make an extended tour over the State to supplement the kind efforts of his correspondents. In various ways, therefore, samples have been collected from the following counties.

For obvious reasons it was thought best to select only a single soil from any one county:



Leon county soil; especially adapted to the growth of the pear.

Orange county soil; especially adapted to the growth of the grape.

Osceola county; especially adapted to the growth of sugar cane.

Hernando county soil; especially adapted to the growth of citrus fruits.

Marion county soil; especially adapted to the growth of citrus fruits.

Brevard county soil; especially adapted to the growth of citrus fruits.

Volusia county soil; especially adapted to the growth of citrus fruits.

Jackson county soil; especially adapted to the growth of the peach.

Bradford county soil; especially adapted to the growth of the strawberry.

Columbia county soil; especially adapted to the growth of tobacco.

Gadsden county soil; especially adapted to the growth of tobacco.

Alachua county soil; especially adapted to the growth of long staple cotton.

Dade county soil; especially adapted to the growth of the pineapple.

The writer has the promise also of a sample of soil from Polk and Manatee, the former especially adapted to the growth of winter vegetables, and the latter to strictly tropical fruits, like the mango, etc.

It was believed that this soil exhibit would be enhanced in interest and at the same time be rendered more serviceable to the people of the State if each exhibit of soil were accompanied by the analysis of the same. This work has been prosecuted as diligently as other duties would permit. When it is considered that the complete and careful analysis of a single soil involves a week or more of continuous work, some idea may be formed of the labor involved in the task which the State Chemist has voluntarily undertaken.

Of the soils whose analysis is given below it may be said: The sample from Tallahassee was taken by the writer in the eastern edge of the town in a "high hammock" wooded lot belonging to Hon. P. Houstoun, which is covered with a pretty heavy growth of live and other oaks, pines, hickories, magnolias, dogwoods, etc., with the usual undergrowth of vines, grape, greenbrier (*smilax*), etc. Land of this description is well adapted not only to the growth of the pear, grape and other fruits, but also for crops common to this latitude. The sample from Orlando, also taken by the writer, was obtained from a somewhat elevated pine land ridge within the town limits, and was purposely selected as a specimen of about the poorest soil in that neighborhood. This sample is not intended for the Chicago Exposition, but is given simply for comparison. The writer hopes to complete the analysis of all the samples in time for the Exposition.

All samples are taken from surface soil to the depth of nine inches from, not less than five different places—in a tract of land of five to ten acres, omitting any spots that from color, texture or other reason seem to differ from average character.

	Good Tobacco soil from Lake City, Columbia Co., sent by P. B. Moodie, Esq.	Good Strawberry soil from Lawley, Bradford Co., sent by Stephen Powers, Esq.	Good Orange soil from De Land, Volusia Co., sent by E. O. Palmer, Esq.	Good Pear soil from Tallahassee, Leon Co., taken by N. Robinson.	Second Class pine land soil from Orlando, Orange Co., taken by N. Robinson.	Good Orange soil from Rockledge, Brevard Co., taken by Hon. H. S. Williams.	Good Tobacco soil from Quincy, Gadsden Co., sent by H. J. Fenton, Esq.	Soil from Cypress Station, Jackson Co., sent by J. E. Comerford, Esq., adapted to the growth of the peach, grape, &c.
Insoluble matter silica (sanu.) silica us, etc.	92.9871	95.4400	95.0742	83.6076	96.0230	98.0121	94.0.9	88.1700
Silica soluble in sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )	1.8200	.3840	1.0110	2.8400	.4031	.1830	1.0030	2.6200
Potash (K <sub>2</sub> O)	.0627	.0223	.0208	.0928	.0190	.0.98	.0541	.0810
Soda (Na <sub>2</sub> O)	.0226	.0064	.0088	.0277	.0084	.0120	.0151	.0103
Lime (CaO)	.0937	.1100	.0525	.2080	.0624	.1150	.1040	.0590
Magnesia (MgO)	.0254	.0200	.0145	.0802	.0175	.0197	.0275	.0230
Brown oxide of manganese (Mn <sub>2</sub> O <sub>3</sub> )	0.84	.5781	.2190	1.6228	.3902	.4360	.6650	1.0400
Oxide of iron (Fe <sub>2</sub> O <sub>3</sub> )	.3143	.3100	.8842	2.8131	.6950	2.440	1.0980	2.6100
Alumina (Al <sub>2</sub> O <sub>3</sub> )	.1445	.2301	.1660	.2685	.1175	.0333	.0782	.1049
Phosphoric acid (P <sub>2</sub> O <sub>5</sub> )	.0106	.0041	.0090	.0384	.0180	.0530	.0439	.0140
Sulphuric acid (S O <sub>3</sub> )				.1721	.0186	.0625	.0625	.0410
Carbonic acid (C O <sub>2</sub> )	2.6400	3.0800	2.3910	6.0792	2.1390	.8010	2.6200	5.1640
Water and organic matter except nitrogen	.2100	.1630	.1890	.2608	.1100	.0261	.1540	.1160
Nitrogen								
Total	99.9474	99.9850	100.0101	99.9817	100.0097	99.9550	100.0147	100.0091
Hygroscopic moisture in air and dried soil	2.5060	1.7030	1.2460	3.3600	.6808	.2100	1.0041	2.4000
Temperature of drying	30. C°	30. C°	30. C°	32.5 C°	29.4 C°	26. C°	25. C°	25. C°
Atmospheric saturation at time of drying	62.	62.	62.	68.	62.	63.	69.	63.

While anything like positive general conclusions must be guardedly expressed in the present state of our knowledge, it will be observed while there are occasional exceptions, that as soon as we leave the more northern and western, or Piedmont region the soils have a certain uniformity of character and composition. If we except the "muck" or reclaimed lands the greater portion of the peninsula proper, is covered with a soil that even the most casual observer pronounces "very sandy." The analyses above given amply confirm the general impression. Not only what are locally termed the "piney woods" but the "hammocks" or "hamaks" (to adopt what is probably a better orthography) as well, maintain this markedly silicious character. From 92 to 98 per cent. of the surface soil of the peninsular portion of the State, assuming that the above analyses are a fair average, is composed of totally insoluble silicious material, which plays no part in the actual nutrition of plants. This, contrary to the general opinion does not necessarily involve a want of fertility. Two or three per cent. of actually assimilable plant food if it exists in the right proportions, is all that is needed to render any soil exceedingly productive. So that here as elsewhere the question is not so much "how sandy is the soil?" but what besides sand does it contain? So far as they go, the analyses published above answer this most important question. For the benefit of those who have given little attention to such analytical tables of soil analysis I may briefly say: All the elements needed for plant food are present in Florida soils. Some of them, however, in very small proportions. Potash and lime are notably deficient. The same may be said of magnesia. Humus and clay, while only indirectly concerned in plant nutrition are nevertheless important factors, in controlling the conditions on which plant nutrition depends, are also in meagre supply. Organic nitrogen while in very liberal proportions, considering the amount of "humus" present, is nevertheless in a quite insoluble condition, and before it can become soluble must await the tardy action of chemical forces whose action is obscure and uncertain in any event, and which under our climatic and soil conditions,

hot summer suns, etc., and especially under unwise methods of culture, are more likely to "burn out" and dissipate this "organic nitrogen" than to fit it to become the food of growing plants. Phosphoric acid, however, as we might expect in a state so liberally supplied, is usually present in fair proportions in our Florida soils.

To make the matter of the deficiency of potash a little more plain than is perhaps obvious to the general reader even with the aid of these tables, it may be said. If a comparison is made with States further North and in the Northwest, California, etc., it will be found that what are termed the "good soils" of these regions contain from ten to one hundred times as much potash as the average South and Middle Florida soil. Then, too, nearly all that does exist is here in an insoluble condition in the form of "zeolites" and other complex silicates, which under the most favorable conditions are very slowly decomposed. It is, therefore, not at all difficult to understand why plants and trees which are not native to this soil unless artificially fertilized usually make here a very meagre growth, or give up the unequal struggle and die in the presence of food which it is beyond their power to reach or assimilate. The importance of these facts to the farmer, fruit-grower, horticulturist and all others interested in the successful cultivation of the soil, it would be hard to over-estimate. It is a source of no little gratification to the writer to know that measurably as the result of such investigations as the above, the prominent manufacturers of fertilizers sold in the State are giving us potash in much more liberal proportions, a fact which can hardly fail to result in great ultimate benefit to manufacturers and consumers alike.

#### SOLUBILITY OF FLORIDA PHOSPHATES. —

The writer is frequently called upon to answer questions as to the effect of various real or supposed solvents upon our Florida phosphates. As there were no authentic data attainable in some of the questions thus propounded it was early in the year decided to institute a series of experiments to determine the matter. It is not deemed necessary here to give in detail the exact methods employed in these researches



as they were published in full in the May Bulletin, and have been widely copied and republished in this country and in Europe. Briefly 1 gramme (15.4 grains) of very finely powdered hard rock phosphate containing 74.80 per cent. tricalcic orthophosphate, 3.30 per cent. of ferric phosphate and 2.98 per cent. of Aluminic phosphate was rubbed up to a cream with distilled water and in a closed glass vessel subjected for five months to the action of one gramme of each of the following real or supposed solvents previously themselves dissolved or suspended in 100 c.c. of distilled water (a little less than four fluid ounces).

The following results were obtained under the conditions named :

The water alone dissolved .64 of one per cent. of phosphoric acid.

The water with muriate of potash dissolved .58 of one per cent. of phosphoric acid.

The water with kainite dissolved .48 of one per cent. of phosphoric acid.

The water with sulphate of potash dissolved .46 of one per cent. of phosphoric acid.

The water with flowers of sulphur dissolved .45 of one per cent. of phosphoric acid.

The water with caustic potash dissolved 1.19 of one per cent. of phosphoric acid.

The water with nitrate of potash dissolved .48 of one per cent. of phosphoric acid.

The water with caustic lime dissolved none.

It requires only the most casual glance at this table to see that except in the case of caustic potash, no solvent action was produced by any of these supposed "solvents." The water alone dissolves more than it does when it contains these other substances in solution or suspension. In other words, they prevent but do not promote solution. In the case of the caustic lime this was especially marked. It may not be inappropriate in passing to observe that this inhibitory effect of the caustic lime is quite consistent with the view for some time entertained by the writer that the solution of "bone



phosphate of lime" in water is really the result of the decomposition of the latter, as truly as in the case of its treatment by a mineral acid.

If we accept the conclusions of Arrhenius, vant Hoff and other investigators, solution in water of most salts involves much more than the mere physical distribution of the particles of a solid among those of a liquid. Profound molecular changes, comparable at least to electrolytic disassociation, appear to accompany such solution. The precise part, which, in the above instance is played by the calcium hydrate, may be somewhat obscure. It is quite conceivable, however, that the presence of an unsaturated excess of a powerful base like lime may so turn the balance of affinities as to entirely prevent those intimate molecular changes upon which the solution in water of tri-calcic orthophosphate depends. At any rate the fact remains, and as shown above, the presence of even presumably inactive salts apparently retards solution, while caustic lime locks up the phosphate in a condition of absolute insolubility.

It is not improbable that the facts given above may have more or less bearing upon the assimilation of phosphates as plant food. It is well known that the acids of the soil, carbonate of potash, and, under certain conditions, ammonia and ammoniated compounds, promote the solution of phosphates, while other substances, as above indicated, completely prevent, or more or less retard it. It is true that in fertilizers, as ordinarily used, the greater portion of the phosphoric acid is already in a "water soluble" state. This, it must be remembered, is an artificially induced and temporary state. How long it will take in any given instance for the "water soluble" phosphoric acid to "revert" or go back to more basic forms, is a matter depending upon so many varying soil conditions, that only approximate and conjectural estimates can be made. It is safe to say, however, that in most soils this "going back" process proceeds quite rapidly. The mechanical condition of these basic phosphates is no doubt greatly improved by their previous solution in acid. In all other respects, in chemical composition, in affinities, in solubility in soil water, save as effected by that improved mechanical

condition, the ultimate products, formed in the earth from phosphoric acid, in whatever form it is applied, are similar to or identical with the original phosphate "rock" from which it was derived.

One important practical inference from the above tabulated results may be noted. Quick, or caustic lime, should never be applied to the soil at the same time with phosphatic manures. A sufficient time should be given for the lime to be neutralized by atmospheric and soil acids. In a caustic state lime renders the phosphoric acid absolutely insoluble in water. In the form of carbonate, except as it promotes nitrification, and to this extent favors the solubility of phosphoric acid, its action upon the water soluble phosphates is simply to promote "reversion," a result which will come sooner or later in any event, and which is preventable by no known means.

#### GYPSUM IN FLORIDA.

Not the least interesting discovery which the writer during the past year has been able to announce is the presence of gypsum in easily workable and probably very extensive beds in the counties of Sumter and Hernando. This gypsum, like the so-called "soft phosphate," exists in a finely pulverulent state. In other words, nature, as in the case of the former product, has relieved us of the trouble and expense of grinding, and when these beds are developed, as they undoubtedly will be, will furnish this material in a very cheap form, and will play no unimportant part in the future industries of the state. It is not unlikely that these beds represent the gypsum in the form in which it was originally deposited from the evaporation of the waters of inland seas during the very latest portion of the neocene period. Whether salt so frequently found as an accompaniment of such deposits will be found in lower strata underneath these gypsum beds is a matter which only subsequent investigation can determine.

Respectfully submitted,

NORMAN ROBINSON,  
State Chemist.

NORMAN ROBINSON, STATE CHEMIST.

# BUREAU OF FERTILIZERS.

## ANALYSES OF FERTILIZERS.

L. A. PERKINS, CLERK.

NAME OF BRAND.	MANUFACTURER.	Moisture Guaranteed	Moisture Found.	Available Phos. Acid Guaranteed.	Available Phos. Acid Found.	Insoluble Phos. Acid Guaranteed.	Insoluble Phos. Acid Found.	Nitrogen as Ammonia Guaranteed.	Nitrogen as Ammonia Found.	Soluble Potash [K <sub>2</sub> O] Guaranteed.	Soluble Potash Found.	Approx. retail value at Florida seaports.
Blood and Bone .....	Little Bros., Jacksonville, Fla.....	8 to 10	6.10	.....	.....	15 to 16	15.02	7 to 8	7.56	.....	.....	33 14
Dark Cotton Seed Meal .....	" " .....	.....	9.75	.....	.....	13 to 21	1.85	6 to 7	6.51	1/2 to 1 1/2	1.10	20 11
Potato Fertilizer .....	" " .....	8 to 10	8.52	7 to 9	8.14	1 to 2	1.45	3 to 4	3.42	9 to 10	10.42	35 61
Calcutta Raw Bone .....	" " .....	7 to 8	6.25	.....	.....	25 to 26	25.07	4 1/2 to 5	4.6	.....	.....	37 29
High Grade Sulphate of Potash ..	" " .....	.....	3.24	.....	.....	.....	.....	.....	.....	48 to 52	48.09	55 89
Sulphate of Potash .....	" " .....	.....	6.10	.....	.....	.....	.....	.....	.....	37 to 30	27.60	33 06
Strawberry Fertilizer .....	" " .....	8 to 10	8.51	6 to 8	8.32	1 to 2	.71	4 to 5	4.00	11 to 12	11.15	39 57
Multum in Parvo .....	" " .....	8 to 10	11.51	7 to 8	8.41	1 to 2	2.84	2 to 3	2.69	4 to 5	4.89	28 23
Nitrate of Soda .....	" " .....	2 to 5	3.10	.....	.....	.....	.....	18 to 22	18.64	.....	.....	46 73
Kainite .....	" " .....	5 to 10	5.83	.....	.....	.....	.....	.....	.....	12 to 14	12.41	14 16
Sulphate of Ammonia .....	" " .....	2 to 5	2.64	.....	.....	.....	.....	.....	.....	.....	.....	73 16
Bone and Potash .....	" " .....	8 to 10	7.94	2 to 3	2.36	10 to 12	11.40	2 to 3	2.43	11 to 12	12.14	35 91
Orange Planters' True Value, spl.	Little Brothers, Jacksonville, Fla...	8 to 10	11.25	10 to 11	11.14	1 to 2	1.08	3 to 4	3.86	10 to 12	13.41	40 75
" " " No. 1 .....	" " .....	8 to 10	10.00	9 to 10	10.26	1 to 2	1.16	3 1/2 to 4 1/2	4.10	10 to 12	11.68	40 34
Young Tree and Nursery Fertilizer	" " .....	8 to 10	8.10	8 to 9	8.26	1 to 2	1.39	4 to 5	4.08	5 1/2 to 6 1/2	6.08	32 87
Orange Tree Florida Phosphate ..	" " .....	8 to 10	7.00	8 to 10	8.06	1 to 2	1.16	3 to 4	3.58	7 to 8	7.84	30 94
Vegetable Fertilizer No. 1 .....	" " .....	8 to 10	10.00	9 to 10	9.03	1 to 2	1.20	5 to 6	5.30	6 to 7	6.82	38 12
Fruit and Vine Fertilizer .....	" " .....	8 to 10	8.90	5 1/2 to 7 1/2	6.14	1 1/2 to 2 1/2	1.76	2 to 3	2.83	12 to 14	13.81	35 89
Orange Planters' True Value, No. 1	Little Bros., Jacksonville, Fla.....	8 to 10	7.42	9 to 10	9.06	1 to 2	1.16	3 1/2 to 4 1/2	4.10	10 to 12	10.56	39 11

Cotton Fertilizer .....	Little Bros., Jacksonville, Fla. ....	8 to 10	8.73	8 to 10	9.02	2 to 4	1.71	1 to 2	1.60	2 to 3	2.49	23 90
Orange Tree Fertilizer .....	Stan. Guano & Chem. Co., N. Orleans	8 to 10	7.42	.....	.....	18 to 23	18.03	5½ to 6½	6.13	5½ to 6½	6.04	39 33
Cabbage Fertilizer .....	" " " " " " " "	11 to 12	9.72	6 to 9	7.02	.....	1.17	4 to 6	5.04	6 to 8	7.14	32 21
Pure Ground Bone .....	" " " " " " " "	6 to 8	6.15	.....	.....	20 to 23	21.49	3½ to 4½	3.89	.....	.....	32 27
Vegetable Fertilizer .....	" " " " " " " "	11 to 13	8.75	7 to 9	7.64	.....	1.06	to 5½	5.12	4 to 5	4.43	30 44
Wando Fertilizer .....	Wando Phos. Co., Charleston, S. C.	7 to 17	6.12	8	10.12	½ to 5	2.83	2½	3.13	1	1.84	27 75
Animal Fertilizer .....	Ames Fertilizer Co., Peabody, Mass.	8 to 10	5.13	8 to 10	9.03	1 to 2	1.46	2 to 4	3.56	3 to 4	3.34	28 25
B. D. Sea Fowl Guano .....	Bradley Fertilizer Co., Boston, Mass.	10 to 20	7.10	8 to 12	10.40	1 to 2	1.52	2 to 3	2.41	1 to 2	1.31	26 27
Bradley's Orange Tree Fertilizer ..	" " " " " " " "	10 to 20	13.52	.....	7.06	10 to 12	4.71	2½ to 3½	3.10	5 to 6	5.70	30 79
Bradley's Vegetable Fertilizer ....	" " " " " " " "	10 to 20	7.48	9 to 11	9.26	1 to 2	1.18	3½ to 4½	4.06	2½ to 3½	3.10	30 86
Pure Fine Ground Bone .....	Bradley Fer. Co., Boston, Mass. ....	10 to 20	5.14	.....	.....	18 to 23	22.04	4 to 5	4.32	.....	.....	33 68
Bone and Potash .....	Bradley Fertilizer Co., Boston. ....	10 to 12	8.94	4 to 6	4.94	6 to 7	7.27	1 to 2	1.49	8 to 10	9.68	30 80
Bradley's Circle Brand Bone & Pot.	Bradley Fertilizer Co., Boston, Mass.	10 to 20	9.52	.....	5.36	9 to 12	6.98	2½ to 3½	3.06	2½ to 3½	3.15	27 67
" German Kainit. ....	" " " " " " " "	3 to 10	4.10	.....	.....	.....	.....	.....	.....	12 to 13	13.26	14 93
Central City Dissolved Bone .....	Southern Phos. Works, Macon, Ga. ..	10 to 15	7.65	8 to 12	11.36	1 to 3	3.45	1 to 2	1.33	1 to 2	1.48	26 31
Monarch Guano .....	" " " " " " " "	10 to 15	9.95	8 to 12	10.14	1 to 3	1.65	2 to 3	2.38	1 to 3	2.84	25 89
Pure Ground Animal Bone .....	Geo. E. Wilson, Jacksonville, Fla. ..	5 to 10	5.06	.....	.....	20 to 25	20.02	3½ to 4½	3.71	.....	.....	30 48
Pulverized Animal Bone .....	" " " " " " " "	5 to 10	5.00	.....	.....	25 to 29	24.91	2 to 3	2.36	.....	.....	36 63
Blood and Bone .....	" " " " " " " "	5 to 10	6.55	.....	.....	9 to 13	14.33	8 to 9	8.03	.....	.....	33 39
Hardwood Ashes .....	" " " " " " " "	10 to 15	13.10	1 to 3	1.60	.....	.....	.....	.....	5 to 8	5.03	10 10
Kainite .....	" " " " " " " "	10 to 20	4.90	.....	.....	.....	.....	.....	.....	11 to 14	12.30	14 07
Sulphate of Potash .....	" " " " " " " "	4 to 8	6.58	.....	.....	.....	.....	.....	.....	24 to 30	26.83	32 50
Acid Phosphate .....	" " " " " " " "	10 to 20	14.03	13 to 17	15.03	2 to 4	4.06	.....	.....	.....	.....	22 25
Nitrate of Soda .....	Geo. E. Wilson, Jacksonville, Fla. ..	2 to 4	2.23	.....	.....	.....	18 to 21	19.38	.....	.....	.....	49 51
Blood and Bone .....	Armour & Co., Chicago, Ill. ....	5 to 7	5.94	.....	.....	15 to 20	15.36	6½ to 8	7.64	.....	.....	33 64
Pulverized Bone .....	Armour & Co., " " " " " "	5 to 8	5.13	.....	.....	23½ to 26½	24.2	3 to 4	3.52	.....	.....	34 25
Ammoniated Dissolved Bone .....	Lister Ag. & Chem. Works, Newark	15	8.50	8	8.42	3	3.22	2	2.31	1	1.36	25 49
Listers' Vegetable Compound ....	" " " " " " " "	12	11.75	8.75	9.12	3	2.01	4½	4.63	7	7.24	35 46
Listers' Celebrated Ground Bone ..	" " " " " " " "	12	8.06	.....	.....	12	15.02	3½ to 3¾	3.42	.....	.....	25 06
Ground Bone .....	Tygart, Allen & Co., Philadelphia..	8 to 10	5.00	.....	.....	18 to 22	20.72	4	4.11	.....	.....	32 24
Orange Tree Fertilizer .....	" " " " " " " "	12 to 14	13.75	7 to 9	7.61	1 to 2	1.71	4 to 5	4.26	4 to 5	4.63	28 93
Star Guano .....	" " " " " " " "	12 to 14	12.48	7½ to 9	8.06	1 to 3	1.02	3½ to 4	3.03	3½ to 5	4.26	26 40
Darling's Pure Fine Ground Bone ..	L. B. Darling & Co., Pawtucket, R. I.	5 to 7	5.81	.....	.....	24 to 26	24.83	3½ to 4	3.75	.....	.....	35 33
Darling's Sulphate of Potash .....	" " " " " " " "	.....	4.63	.....	.....	.....	.....	.....	.....	25 to 28	26.41	32 05
Orange Tree & Vine F., formula A	L. B. Darling & Co., Pawtucket, R. I.	10 to 13	10.50	2 to 4	3.16	8 to 10	8.84	5 to 6	5.46	3½ to 4½	4.16	33 84
" " " " " " " " B	" " " " " " " "	10 to 13	6.25	2 to 4	3.01	8 to 10	8.76	2½ to 3½	2.94	11 to 13	12.21	36 44
Complete Fertilizer, D Brand ....	" " " " " " " "	10 to 12	4.86	7 to 9	8.28	3 to 5	3.76	4½ to 5½	4.92	6 to 8	7.13	37 99
" " " " " " " " formula C	" " " " " " " "	10 to 12	6.48	5 to 7	6.84	5 to 7	6.24	3½ to 5	4.62	7 to 9	8.14	38 84

NAME OF BRAND.	MANUFACTURER.	Moisture Guaranteed.	Moisture Found.	Available Phos. Acid Guaranteed.	Available Phos. Acid Found.	Insoluble Phos. Acid Guaranteed.	Insoluble Phos. Acid Found.	Nitrogen as Ammonia Guaranteed.	Nitrogen as Ammonia Found.	Soluble Potash [K <sub>2</sub> O] Guaranteed.	Soluble Potash Found.	Approx. retail value at Florida seaports.
Americus Brand Orange Tree Fer.	Williams & Clark, New York	10 to 18	10.06	6 to 9	6.84	1 to 2	1.12	3 to 4	3.68	6 to 8	7.63	30 15
Americus Brand Fl. Veg. Fer.	"	10 to 18	10.12	6 to 8	6.23	1 to 2	1.09	4 to 5	4.69	5 to 7	6.68	30 88
Americus Brand Pure Bone Meal.	"	8 to 15	6.10			18 to 25	21.75	3 to 5	4.36			33 27
Linseed Meal	Nat'l Linseed Oil Co., Chicago, Ill.		7.09	6.13			2.41	2.43	6.29	1.11	1.12	21 82
Bellevue Soft Phosphate, sample 1	Bellevue Soft Phos. Co., Jack'ville		6.55	5.15	23.11	.70						4 90
Bellevue Soft Phosphate, sample 2	Bellevue Soft Phos. Co., Jack'ville		6.55	4.03	23.11	1.16						5 47
Cigar Leaf Tobacco Fertilizer, No. 1	Wilcox & Gibbs, Savannah, Ga.	10 to 12	10.25	5 to 6	5.42	1 to 2	1.18	5 to 6	5.31	10 to 12	11.02	37 78
Complete Cotton Fertilizer	Commercial Guano Co., Savannah	12 to 16	16	8 to 11	9.40	1 to 3	2.06	2 to 3	2.41	1 to 2	1.64	24 49
German Kainite	Commercial Guano Co., Savannah	8 to 12	6.13							11 to 13	12.18	13 96
Georgia State Standard	Hammond, Hull & Co., Savannah	10 to 12	11.75	8 to 10	9.46	1 to 2	1.48	2 to 2½	2.21	2 to 3	3.44	23 73
Farmers' Ammoniated Dis. Bone	"	12 to 15	11.25	8 to 10	9.83	1 to 2	1.68	2 to 2½	2.14	1 to 1½	1.18	22 92
Mapes' Orange Tree Fertilizer	Mapes F. & Guano Co., New York	10 to 12	8.03	6 to 8	7.93	2 to 4	2.58	4 to 5	4.09	3 to 4	3.87	33 14
" Manure for Vegetables	"	10 to 12	9.32	6 to 8	7.24	2 to 4	2.37	5 to 6	5.82	4 to 6	5.41	36 58
" Fruit and Vine Manure	"	8 to 10	7.84	5 to 7	6.48	2 to 4	3.33	2 to 3	2.71	10 to 12	11.61	35 21
" Pure Ground Bone	"	10 to 12	6.44			20 to 25	23.63	3 to 5	4.21			35 05
" Sulphate of Potash	"	4 to 6	4.21							27 to 30	28.32	34 15
Bowker's Vegetable Grower	W. H. Bowker Fer. Co., Boston	12 to 16	13.21	7 to 8	7.86	1 to 2	2.66	4 to 5	4.30	4 to 5	6.10	34 55
" Bone & Potash, square B	"	12 to 16	12.86	4 to 5	5.01	5 to 6	6.64	2 to 3	2.65	2 to 3	2.81	25 49
" Orange Grower	"	12 to 16	13.02	8 to 10	8.96	2 to 4	3.49	3 to 4	3.42	4 to 6	5.02	30 00
" Fresh Ground Bone	"	8 to 12	7.21	5 to 7	5.21	13 to 17	18.46	3 to 4	3.81			34 29
" Tobacco Grower	"	12 to 16	13.61	8 to 9	8.72	1 to 2	2.57	3 to 4	3.41	4 to 6	8.56	35 39
" Sulphate of Potash	"		6.24							23 to 28	25.86	31 44
" High Grade Potash	"		5.31							48 to 52	49.12	57 32
" Nitrate of Soda	"		2.13					18 to 19	18.24			46 89
Dark Cotton Seed Meal	Madison Oil Mills, Madison, Fla.	6 to 8	6.14			2 to 3	2.05	5 to 7	6.43	¾ to 1½	1.18	20 42



Bright Cotton Seed Meal.....	Macon Oil & Fer. Co., Macon, Ga.	2 to 3	6.21	.....	.....	2.40	2.40	8 to 9	8.46	1 to 2	1.92	26 11
Bright ".....	Central Oil Co., Selma, Ala.	7.65	6.34	.....	.....	3.22	3.20	8.24	8.30	1.96	1.95	26 50
Pine Apple Food No. 2.....	The Paine Fer. Co., Jacksonville...	8 to 11	7.75	8 to 10	9.21	4 1/2 to 7	4.81	2 1/2 to 4	2.61	6 to 8	6.40	31 58
Fruit Grower for Bearing Trees...	" " "	9 to 11	10.41	5 to 7	6.48	2 to 4	4.33	2 to 3	2.21	10 to 12	11.36	31 94
Palmer's Tree Grower.....	" " "	9 to 11	7.95	5 to 8	6.31	2 to 4	7.51	4 to 5	4.06	3 to 4	3.56	30 88
Nitrate of Soda.....	" " "	10 to 20	2.60	.....	.....	.....	.....	18 to 20	1.30	.....	.....	47 01
German Kainit.....	" " "	12 to 14	12.21	.....	.....	.....	.....	.....	.....	12 to 14	12.11	13 89
Sulphate of Potash.....	" " "	.....	7.14	.....	.....	.....	.....	.....	.....	25 to 29	26.48	32 07
Welshton Soft Phosphate.....	Soft Phos. Co., Welshton, Fla.	5	2.86	1 to 2	1.08	15 to 25	19.06	.....	.....	.....	.....	6 20
Cudahay Bone and Blood.....	Cudahay Packing Co., Omaha, Neb.	5	4.85	2 1/2	2.71	11 1/2	8	11.72	8	8.03	1 1/2 to 1 1/2	28 34 29
" Pulverized Bone.....	" " "	5	4.21	6	6.11	22	22.45	3	3.02	1	26	37 88

*Samples Furnished by Manufacturers.*

Blood, Bone and Tankage.....	Fort Worth Packing Co., Texas	7 to 25	7.40	.....	.....	12.98	13.04	6.64	6.68	.....	.....	29 30
Ammoniated Dissolved Bone.....	Baldwin Fer. Co., Savannah, Ga.	12 to 15	14.10	9	9.40	2	2.16	2	2.14	2	2.08	24 86
Georgia State Grange Acid Phosp.	" " "	10 to 12	10.36	12 to 14	14.40	2	1.21	.....	.....	.....	.....	28 53
Georgia State Grange Fertilizer	" " "	14 to 15	14.28	9	9.82	2	2.21	2	2.23	2	2.08	25 69
Goulding's Special Compound.....	Goulding Fer. Co., Pensacola, Fla.	10 to 15	13.42	9 to 11	10.23	1 to 2	1.27	2 1/2 to 2 1/2	2.38	1 to 2	1.87	35 08
" Bone.....	" " "	10 to 15	13.50	9 to 11	10.28	1 to 2	1.25	2 1/2 to 2 1/2	2.33	1 to 2	1.33	24 82
" Superphosphate.....	" " "	12 to 15	14.06	12 to 15	14.48	1 to 2	1.05	.....	.....	.....	.....	23 58
St. George's Fertilizer.....	" " "	10 to 15	10.06	7 to 9	8.10	1 to 3	1.81	1 1/2 to 2	1.29	2 to 3	2.13	20 42
Seminole Compound.....	" " "	10 to 15	10.06	7 to 9	8.10	1 to 3	1.81	1 1/2 to 2	1.30	2 to 3	2.11	20 52
Crocker's Orange Tree.....	Crocker Fer. Co., Buffalo, N. Y.	12	18.40	9 to 12	10.32	1 to 2	1.45	4 to 6	4.85	3 to 5	3.81	33 75
" Fruit and Vine.....	" " "	12	12.70	7 to 10	8.80	1 to 2	1.43	2 to 4	3.04	11 to 14	12.59	37 27
Kainit.....	Imperial Fer. Co., Charleston, S. C.	.....	5.08	.....	.....	.....	.....	.....	.....	12	13.10	14 79
Pure Fine Ground Bone.....	Thompson & Edwards, Chicago, Ill.	8 to 10	7.13	.....	.....	20 to 25	21.11	3 to 4	3.41	.....	.....	30 93
World of Good Orange Tree Fer.	" " "	8 to 10	8.13	10 to 12	10.23	.....	4.80	3 to 4	3.32	12 to 14	12.76	42 79
Animal Guano, Blood and Bone ..	" " "	5 to 7 1/2	6.10	.....	.....	12 to 14	15.44	6 1/2 to 7 1/2	7.14	.....	.....	32 72
Chicago Bone Meal.....	" " "	6 to 8	6.32	.....	.....	14 to 17	15.48	2 to 3	2.61	1 to 2	2.80	26 78
World of Good Veg. & Potato Fer.	" " "	7 to 9	7.14	6 to 8	7.22	8 to 10	7.80	3 to 4	4.40	8 to 10	9.36	40 84
Soft Phosphate.....	Deacon Phos. Co., Anthony, Fla.	2 to 5	2.13	1 to 2	1.13	19 to 24	24.57	.....	.....	.....	.....	7 72
Soft Phosphate.....	Bonnie May Mines, Dade City, Fla.	2 to 5	2.48	1 to 2	1.28	24 to 30	28.36	.....	.....	.....	.....	9 55
Bartola's Veg. and Young Tree F.	O. D. G. Bartola, Enterprise, Fla.	10 to 15	11.34	5 to 7	5.40	1 to 3	1.76	5 to 6	5.31	6 to 8	6.10	31 77
Bartola's Blood, Bone & Potash..	" " "	8 to 10	8.19	.....	.....	10 to 20	11.53	3 to 4	3.26	7 to 8	7.38	30 46
Bartola's Orange Tree Food.....	" " "	10 to 15	11.83	4 to 5	4.48	3 to 4	3.20	2 1/2 to 3 1/2	3.06	11 to 13	12.30	33 35
Bartola's Bone and Potash.....	" " "	8 to 10	8.46	.....	.....	10 to 20	14.43	2 to 4	2.89	8 to 10	8.05	33 21



NAME OF BRAND.	MANUFACTURER.	Moisture Guaranteed.	Moisture Found.	Available Phos. Acid Guaranteed.	Available Phos. Acid Found.	Insoluble Phos. Acid Guaranteed.	Insoluble Phos. Acid Found.	Nitrogen as Ammonia Guaranteed.	Nitrogen as Ammonia Found.	Soluble Potash [K <sub>2</sub> O] Guaranteed.	Soluble Potash Found.	Approx. retail value at Florida seaports.
No. 2 Orange Food .....	Fia. Fer. & Mfg. Co., Gainesville, Fla.	10 to 12	8.21	5 to 6	6.12	7 to 9	9.36	2 to 3	2.38	4 to 5	4.68	31 72
Fish and Potash .....	" "	10 to 12	9.47	3 to 4	3.18	2 to 3	2.06	5 to 9	8.16	3 to 5	3.46	29 68
Strawberry Fruiter .....	" "	10 to 12	8.64	6 to 7	7.48	3 to 3½	5.06	2 to 2½	2.14	10 to 11	11.08	35 49
Peruvian Fish Guano No. 1 .....	" "	10 to 14	8.70	6 to 7	6.13	2 to 3	2.85	4 to 5	4.31	4 to 5	4.43	27 87
Blood and Bone, No. 3 .....	" "	10 to 13	7.81	.....	4.43	.....	6.70	3½ to 5	3.61	4 to 5	4.53	29 54
Cigar Leaf Tobacco Fertilizer .....	" "	10 to 12	7.80	.....	3.10	4 to 5	2.40	5 to 6	5.61	6 to 8	7.92	33 00
Cotton Food .....	" "	10 to 12	8.31	7 to 8	7.73	.....	1.61	2½ to 3½	3.06	4 to 4.50	4.18	27 36
Potato Mixture .....	" "	10 to 12	7.60	3 to 4	5.46	4 to 5	6.69	3½ to 4½	3.61	9 to 10	9.64	36 59
Pineappl. Special .....	" "	10 to 12	8.41	2 to 3	3.14	2 to 3	5.45	7 to 9	7.26	6 to 8	6.44	37 34
No. 2 Or. Mix., dbl. str. Potash ..	" "	10 to 12	8.13	5 to 6	5.83	4 to 5	5.06	1.2 to 2½	1.46	10 to 11	10.04	30 76
Soft Phosphate .....	Stan. Ph. & Min. Co., Kendrick, Fla.	6 to 8	1.35	2 to 3	2.03	25 to 27	21.13	.....	.....	.....	.....	9 17
Blood & Bone No. 3, 2d sample ..	Fia. Fer. & Mfg. Co., Gainesville, Fla.	10 to 13	8.10	4 to 5	4.75	5 to 7	6.78	3.5 to 5	3.89	4 to 5	4.46	30 63
Blood and Bone No. 3, 3d sample ..	" "	11 to 13	10.04	4 to 5	4.11	5 to 7	5.10	4 to 5	4.91	4 to 5	4.59	30 45
Bone and Tagage .....	L. B. Darling & Co., Pawtucket, R. I.	7 to 9	9.24	2 to 5	2.16	13 to 15	13.10	6 to 7	6.81	.....	.....	.....
Kalinite .....	" "	2 to 5	3.10	.....	.....	.....	.....	.....	.....	11 to 12	11.72	.....

## AGRICULTURE.

---

Concerning the operations of this Bureau for the past two years, it gives me pleasure to report the rapid progress usefulness and influence for good it has attained in the line of its work.

It has each year continued to collect and publish the reports of comparative average conditions and results, or yields of crops of all kinds as they are planted, grown and harvested throughout every portion of the State.

Having held the office of Commissioner of Agriculture since its creation by the Constitution, practical experience has demonstrated to me conclusively the great benefit to be derived by the people of the State by the publication of such reports and the final publication of the statistics of the various productions of the State at the close of each year. The circulation of these reports and statistics throughout the State is productive of much good in many ways. It stimulates the planting many crops in localities where such crops have never before been planted, and with success, too. It stimulates also the increased planting of many crops which have heretofore occupied the tail-end of farm production until the renewed interest thus awakened, suddenly shows them to be the most profitable of crops. By this means it at once, more than anything else, proves that the diversification of crop production is the only means of obtaining profitable results in farming, and it accomplishes this through its publication of condition and results of crops in the several counties.

The compiling and publication of the agricultural statistics in their several and kindred branches, in connection with the above, serves another and equally as valuable purpose, viz: that of inducing immigration. In the immense correspondence on that subject referred to elsewhere in this report, the one question almost invariably asked by the party or parties

seeking information is, "What do you grow in Florida?" A copy of the agricultural statistics and the crop Bulletin answers the question completely. These two publications furnish for such purposes a fund of information never before enjoyed by the State and absolutely unattainable in any other way. This will readily be seen upon examining the statistics in tabular form following this report.

As to the financial matters of the Bureau, it seems only proper in the beginning, to state that the Commissioner does not believe that the funds of the Bureau should go into the general revenue fund as thought and contended by some, nor that the law interpreted as intended by the Legislature which enacted it, does contemplate any such use of the funds derived from the inspection of fertilizers, but that such fund should be held by the Commissioner of Agriculture for the sole use and purposes described in Chapter 3857, Laws of Florida, and explained further on in this report.

The legislature of 1891 made an appropriation for the benefit of the Bureau, but as yet that fund has not been required and consequently does not appear to the credit of the department. Thus the statement of the Bureau of Fertilizers shows the unquestionable fact that the Department of Agriculture has not cost the tax-payers of the State one cent, but on the contrary has saved to the farmers and fruit-growers many thousands of dollars out of which they have heretofore been unmercifully robbed without recourse. The farmers and fruit-growers do not pay the tax of 25c per ton on fertilizers (as many suppose) for the manufacturers are selling higher grades of goods for less money than before the enactment of the fertilizer law. Chemical inspection has driven out the worthless material and left the field to reputable manufacturers. Should the legislature amend the law in conformity with a suggestion made elsewhere, it will enable the Commissioner to more fully carry out the intents and purposes of the law as expressed in sub-sections 1, 2, 3, 4 and 5, Chapter 3857, passed by the Legislature of 1889, as follows:

SEC. 5. That the duties of the Commissioner shall be :

1. He shall prepare, under his own direction, a hand-book,

describing the geological formation of the various counties of this State, and also the topographical features of said counties, with information as to the general adaptation of the soil of said counties for the various products of the temperate and semi-tropical zones. And for the purpose of obtaining a more general and careful estimate of the capacity and character of the soil of the counties in this State, he shall procure correct analysis of the same.

2. He shall give information upon the above subject and others of interest to those who till the soil of this State, in circular or pamphlet form, which shall be placed with the judges of the county courts in the respective counties in this State, and to agricultural associations of the various counties of this State, for free distribution at such times as the Commissioner may be prepared to do so.

3. The Commissioner shall provide for the proper and careful distribution of any seeds that the Government of the United States may desire to introduce into the State of Florida, and shall make arrangements for the importation of seeds that he may deem of value to this State, and for the proper, careful and judicious distribution of the same, also for the exchange of seeds with foreign countries or adjoining States, for seed from this State, and their distribution in a proper manner shall be entirely under his supervision and control.

4. The Commissioner shall collect specimens of wood suitable for manufacturing and other purposes, and specimens of agricultural, mineral, phosphate and marl deposits of the State, and cause correct analysis of such as may be deemed by him expedient, and record in a suitable book, to be kept for that purpose, such analysis, together with the name of the county in which such mineral, phosphate or marl may be found to exist, and shall publish such facts with his annual report, which report shall be distributed through the State to the various agricultural organizations and associations, and in such other manner as he may think best to promote the interest of agriculture.

5. It shall be the duty of the Commissioner of Agriculture to adopt and arrange some plan for collecting and publishing

agricultural, horticultural, pomological and farm statistics in connection with his annual report, in such form and numbers as he may deem best, or the financial condition of the department will permit, and he shall, before the first day of January in each year, furnish the Tax Assessors of the several counties of the State with the necessary blanks, together with such instructions as will properly direct them in that work, and such blanks shall contain only such questions as relate to agriculture, horticulture and stock-raising.

This fund, however, will not be sufficient of itself for all purposes contemplated in the law, but there is a sum (\$7,018.22) which was collected under the old immigration law, and referred to elsewhere, that would be sufficient to pay for the collection of all the geological, topographical and similar information, and pay for its publication in book or pamphlet form. Such a work would be of almost incalculable value, and would fill a constantly increasing demand for reliable information concerning the State. The demand for such information is immense and rapidly increasing, and the only response to these demands is in the shape of the Monthly Bulletin, the statistics, a few papers and county pamphlets several years old, and by written correspondence. Since July, 1891, all matters pertaining to immigration have been carried on and the work performed by this Bureau without extra expense, in which time to the present (January 1, 1893,) a great deal of good work has been done, something over four thousand five hundred (4,500) requests for information having been acknowledged by packages containing printed matter, maps and land lists or by personal letter. I am glad to say many of these have borne and continue to bear fruit in the shape of immigrants, for it is within the personal knowledge of the Commissioner that a large number have through this means been induced to make Florida their home. I also take pleasure in saying that the settlers themselves almost invariably ascribe their first interest in Florida and final removal here to the influence of the Monthly Bulletin and its publication of the crop conditions and crop results throughout the State, as well as other matters of information, statistical and otherwise, heretofore unknown or at least unnoticed.



The expenses for printing the Monthly Bulletin have in large part been paid by the proceeds of advertisements within its pages, and the printing of the blanks for the collection of crop reports and statistics has been done in the office with the aid of a Neo-type duplicating apparatus. This little machine, I take pleasure in saying has saved to the State upwards of \$500 per year, and has done a large amount of work for the Executive, Comptroller, Treasury and Public Instruction Departments. In round numbers it has clearly saved to these departments at least \$1,200 in the past two years. The expense of postage on all the correspondence above referred to has been borne by the Bureau and paid out of the funds arising from the inspection of fertilizers; none of it being paid for by the State.

This fund has also born the entire expense of the salaries of the State Chemist, three clerks and a stenographer, who was employed in the office for a short time when the press of correspondence of the department was so great, that such help was absolutely necessary to a prompt and proper conduct of the business. In the fall of 1891 the Bureau purchased a large quantity of tobacco seed of the Cuban variety (Vuelta Abajo) and distributed it free to all who applied for it. The Bureau also received a donation of several pounds of fine imported seed of the same variety at the hands of Judge A. DeLono, of Key West. The number of persons thus supplied gratuitously with the finest seed obtainable, was something over 1,800. The Bureau also received at the hands of Senator Samuel Pasco a quantity of garden seed which were distributed free to applicants. In the fall of 1892 the Bureau again purchased a large quantity of tobacco seed and again was placed under obligations to Judge DeLono for a donation similar to that of 1891, all of which is at present being rapidly distributed to those desiring to and already engaged in the business of tobacco growing. Nearly 800 persons have been supplied with seed so far this season.

Thus it will be seen that the Bureau has ever been and is making every effort possible, with the limited means at its command, to advance the interests of the people of the State

by fostering and encouraging new industries within the State, and by disseminating abroad information which returns to the State thousands of dollars per annum in new property acquired through the channel of immigration, as a direct result of such efforts. A pretty good return, when it costs the State no investment of capital, no wear and tear on the climate and no impairment of its resources. The Bureau of Agriculture emphatically is a friend of the people. In reading the tables of statistics following, it will be observed that Madison county makes no report. This the Commissioner greatly regrets, as it leaves a break which makes itself manifest throughout the whole list of tables, and because it deprives the people of Madison county of the advantage of showing to the balance of the State and the outside world her many resources. In this connection, it is proper to say that this is no fault of the Commissioner, for he did all in his power to get the Tax Assessor of the county to make the report, repeatedly asking for it, without even receiving from the assessor, Mr. T. T. Ellison, one word of explanation. He alone is to blame. Such action on the part of county or county officers is worthy of severest censure.

The tabulation of the statistics for 1891 show a very gratifying increase in the value of agricultural and kindred productions over that of 1889 and 1890, while a perusal of the comparative table shows some surprising results as to the changes in the relative positions assumed by several of the crops for the past three years. A casual glance will suffice to show the wonderful progress made in the increase of a number of crops. Table No. 8 is also of interest, as showing the total value of products by counties, and which enables those interested to make comparisons if so disposed. A new and valuable feature in the line of statistics has been added to this report, although no provision has been made for the work, viz., the collection and publication by this Bureau in tabular form of the principal articles of export of Florida production and their export valuation. The magnificent exhibit of the State's resources that it makes is exceedingly

gratifying, and will no doubt be a matter of considerable surprise to a large majority of our people. Yet the Commissioner feels compelled to say that even this large amount of actual surplus does not represent by a large sum the total surplus, or in reality profit, for the simple reason that the Bureau has not had the means at its disposal to enable it to pay for the collection of such data and the work of compilation. And now in this connection, and in view of the oft stated and apparent financial embarrassment of the State, it seems curious if not significant, that the surplus products of the State should amount to over  $33\frac{1}{3}$  per cent. of the total assessed valuation of the taxable property of the State. Yet this is just what is shown, and it is gratifying, too, as evidence of the true value of Florida's resources. The export table of 1892 is not complete, owing to the fact that the farm statistics had not been obtained and will not be taken till 1893, but it makes, nevertheless, a most excellent showing of those articles therein enumerated.

The Commissioner is under obligations to the several Customs and Revenue Officers of the various ports of the State, and others for material aid in the collection of these statistics. Also, to the tax assessor and the efficient corps of correspondents who have so faithfully and efficiently labored to help the Bureau attain whatever measure of success may be awarded it. To one and all he hereby extends his sincere and hearty thanks.



01814 1 601

AGRICULTURAL STATISTICS

OF THE

STATE OF FLORIDA,

COLLECTED BY THE

COMMISSIONER OF AGRICULTURE

FOR THE YEAR 1891.



## No. 1. FIELD

COUNTIES.	CORN.			HAY.		
	Acres.	Bushels.	Value.	Ac's.	Tons.	Value.
Alachua .....	23,121	264,225	\$201,653 00	697	788	\$8 861 00
Baker .....	1,896	17,924	17,924 00	3	4	56 00
Bradford .....	11 671	122,152	98,516 00	30	36	360 00
Brevard .....	141	1,745	1,602 00	28	38	660 00
Calhoun.....	1,529	13,870	13,840 00	..	..	..
Citrus.....	1,791	18,835	18,835 00	27	20	156 00
Clay.....	2,716	22,726	18,180 40	37	29	526 50
Columbia....	25,286	224,800	169,249 00	93	55	1,069 00
Dade .....	..	..	..	..	..	..
DeSoto .....	1,721	24,835	24,840 00	6	2	40 00
Duval .....	1,057	22,282	15,730 45	63	164	1,930 00
Escambia....	1,586	48,218	20,538 50	575	761	12,255 00
Franklin....	127	1,865	1,735 00	..	..	..
Gadsden .....	19,070	173,550	118,928 50	15	15	150 00
Hamilton .....	19,330	176 675	134,254 00	..	..	..
Hernando .....	1,614	10,536	10,784 00	19	91	567 00
Hillsborough	3,047	22,486	21,266 50	29	32	497 25
Holmes .....	5,869	53,479	53,479 00	12	7	129 00
Jackson .....	34,956	344,512	248,448 00	..	..	..
Jefferson .....	37,412	358,320	179,160 00	450	909	13,635 00
LaFayette .....	11,839	123 849	123,749 00	..	..	..
Lake .....	1,577	14,302	13,571 75	263	392	7,563 00
Lee .....	52	633	633 00	..	..	..
Leon .....	51,714	547,654	273,327 00	2,300	2,700	29,000 00
Levy .....	4,724	37,008	29,918 10	2	2	25 00
Liberty .....	2,551	19,080	18,795 00	..	..	..
*Madison .....	..	..	..	..	..	..
Manatee.....	500	5,385	2,911 75	..	..	..
Marion .....	8,798	85,786	85,016 00	350	757	15,150 00
Monroe .....	..	..	..	..	..	..
Nassau .....	2,769	28 243	10,769 00	11	13	209 00
Orange .....	1,185	11,909	11,991 00	135	491	8 867 00
Osceola.....	327	3,434	3,434 00	18	175	734 00
Pasco .....	1,284	13,146	13,146 00	70	140	2,524 00
Polk.....	3,991	35,244	35 244 00	21	26	490 00
Putnam .....	11,352	49,400	32,652 00	522	196	2,799 00
St. Johns .....	823	8,199	6,982 00	26	64	849 00
Santa Rosa .....	3,035	29,299	28,894 00	118	94	1,338 00
Sum'er .....	4,662	39,910	36,355 00	694	908	8,682 00
Suwannee....	20,058	197,995	149,955 00	..	..	..
Taylor .....	5,992	45,598	38,019 00	..	..	..
Volusia .....	236	2,195	2,185 00	11	27	214 00
Wakulla .....	8,534	56,823	52,966 00	..	..	..
Walton .....	5,594	54,652	39,320 00	63	70	1,396 00
Washington..	7,142	78,775	59,915 00	4	10	100 00
Totals .....	353,679	3,411,134	\$2 438,111 95	6,692	9,016	\$120,831 75

\*No report..

**CROPS.**

COTTON (Upland.)			COTTON (Sea Island.)		
Ac. es.	Bales.	Value.	Ac. es.	Bags.	Value.
.....	.....	.....	6,599	1 346	\$74,106 00
.....	.....	.....	1,639	482	28,758 00
.....	.....	.....	5,048	1,850	60,839 00
520	258	\$7,280 00	.....	.....	.....
.....	.....	.....	458	82	5,562 00
16	4	115 00	13,992	2,436	124 539 45
.....	.....	.....	.....	.....	.....
.....	.....	.....	3	2	40 00
155	55	2,005 00	.....	.....	.....
7,425	2,248	70,557 00	256	80	3 361 00
21	7	220 00	13,794	2,991	149,100 00
.....	.....	.....	8	1	74 00
.....	.....	.....	.....	.....	.....
3,490	1,106	35,630 30	.....	.....	.....
32,765	11,233	388,966 00	.....	.....	.....
31,639	7,365	247,448 00	.....	.....	.....
.....	.....	.....	3,089	1,454	29,512 00
.....	.....	.....	18	4	112 00
.....	.....	.....	.....	.....	.....
42,585	12,151	387,067 00	1,459	308	13,037 15
276	87	3,678 00	.....	.....	.....
.....	.....	.....	.....	.....	.....
6	3	57 59	882	124	5,790 00
.....	.....	.....	297	139	5,333 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
177	41	2,100 00	243	58	3,000 00
124	51	1,600 00	.....	.....	.....
.....	.....	.....	140	36	1,690 00
.....	.....	.....	9,819	1,773	111,851 00
33	12	373 63	1,579	376	21,141 65
.....	.....	.....	.....	.....	.....
2,497	696	19,090 00	30	6	310 00
1,991	650	19,523 00	.....	.....	.....
2,527	808	27,860 00	.....	.....	.....
126,247	36,778	\$1,218,570 52	59,253	13,647	\$638,156 25

## No. 1. FIELD

COUNTIES.	RICE			FIELD PEAS		
	Acres	Bushl.	Value.	Acres.	Bash's.	Value.
Alachua .....	39	605	\$690 00	1,268	9 438	8,446 00
Baker .....	29	330	330 00	321	1,128	1,588 00
Bradford .....	299	5,514	3,814 00	1,393	10,872	10 804 00
Brevard .....	4	105	100 00	55	650	775 00
Calhoun .....						
Citrus .....				981	15,223	19 016 00
Clay .....	19	303	448 50	204	1,127	2 229 00
Columbia .....	107	1,801	1,785 70	647	2,526	2,608 00
Dade .....						
DeSoto .....	56	1,512	2,795 50	580	3,005	5,268 00
Duval .....	24	1,486	1,653 00	118	5,220	6,768 00
Escambia .....	1	30	30 00	5	55	55 00
Franklin .....				90	2,800	2,675 00
Gadsden .....	30	519	519 00	60	491	504 00
Hamilton .....	58	1,038	1,038 90	960	6,304	6,304 00
Hernando .....	32	746	899 00	135	1,203	1,399 00
Hillsborough ...	58	1,599	1,965 60	465	3 232	4,828 90
Holmes .....	78	1,244	1,236 50	461	1,857	1,857 00
Jackson .....	112	1,751	1,296 00	163	1,716	1,649 00
Jefferson .....				227	2,726	2,598 00
LaFayette .....	1	10	20 00	529	2,191	2,191 00
Lake .....	12	275	442 25	97	744	1,264 25
Lee .....	16	738	1,476 00	106	1,055	2,110 00
Leon .....	21	690	683 00	1,375	12,240	12,240 50
Levy .....	13	163	163 00	487	2,649	3,349 50
Liberly .....	19	517	517 00	11	58	58 00
*Madison .....						
Manatee .....	36	1,505	2,940 00	159	1,251	2,298 00
Marion .....	247	3,964	3,964 00	449	2,879	5,140 00
Monroe .....						
Nassau .....	88	1,420	3,315 00	108	971	1,049 00
Orange .....	9	252	468 00	714	5,486	9,524 00
Osceola .....	1,506	6,258	6,364 00	31	452	739 00
Pasco .....	25	334	491 00	7	778	1,643 00
Polk .....	11	158	275 00	195	960	1,427 00
Putnam .....	8	217	217 00	685	8,134	10,464 00
St. Johns .....	106	1,186	1,202 00	12	65	125 00
Santa Rosa .....	36	370	394 00	118	603	725 00
Sumter .....	22	223	303 00	875	5,492	10,169 00
Suwannee .....	1	40	40 00	957	9,570	9,570 00
Taylor .....	4	50	50 00	153	838	811 00
Volusia .....				5	35	35 00
Wakulla .....	1	10	10 00	81	885	885 00
Walton .....	72	1,395	1,395 00	629	9,061	8,995 00
Washington ...	15	460	460 00	5	50	50 00
Totals .....	8,115	38,818	\$43,740 05	15,984	136,020	\$164,134 15

\*No report.

**CROPS. Continued.**

SUGAR CANE.					TOBACCO		
Ac's	Bbls Syrup.	Value.	Sugar. (l's)	Value.	Ac's	Pounds.	Value.
187	1,945	\$29,555 00	50,060	\$2,187 00			
33	205	2,035 00	7,560	375 00			
314	2,422	21,780 00	34,970	3,067 00			
42	397	7,260 00			1	904	\$105 00
39	647	4,299 00					
168	1,299	49,160 00					
93	485	5,817 00	4,730	283 80	1	110	33 00
278	1,953	20,323 00	31,070	1,590 00	4	1,510	445 00
84	643	7,352 00	15,300	1,284 00			
277	952	10,390 25	7,560	673 32	12	7,580	2,616 00
73	328	8,715 00			1	240	43 00
12	86	580 00					
439	5,016	36,303 00	300	15 00	1,133	432,474	126,450 90
207	1,220	12,216 00	31,000	1,874 00			
54	242	3,875 00	1,550	94 00			
118	655	9,452 50	3,830	216 00	1	175	152 50
97	579	4,386 75	3,233	162 75	11	3,861	1,956 00
292	3,259	33,430 00	1,400	102 00			
783	7,485	74,850 00					
149	968	9,960 00	13,400	1,134 00			
43	224	3,384 00	150	10 00	3	150	220 00
53	279	6,420 00					
532	4,442	30,242 50	18,400	920 00	152	53,314	12,025 75
95	429	7,018 00	9,670	483 50	1	400	120 00
64	610	3,749 00					
48	374	4,296 00					
211	1,262	18,935 00	2,000	100 00			
5	100	2,780 00					
116	715	8,186 00	10,613	486 00	1	500	200 00
62	513	7,534 00			1	60	300 00
724	901	5,117 00	1,200,200	48,012 00			
47	206	2,526 00	3,780	230 00			
37	215	2,502 00	4,190	219 00			
78	553	5,430 00	680	35 00			
76	340	3,938 00	44,654	1,892 00			
132	352	7,125 00					
185	747	12,584 80	1,400	73 00			
212	1,044	10,440 00	2,200	88 00			
47	351	3,649 00	1,450	86 50	1	65	17 50
1	5	100 00					
67	760	5,402 00	300	13 00			
137	917	9,233 00			1	365	165 00
170	1,148	11,480 00			7	2,50	1,275 00
6,881	47,273	524,171 80	1,503,650	65,705 87	1,331	504,208	146,129 65

## No. 1. FIELD

COUNTIES.	MILLET.			PEANUTS.		
	Acres.	Tons.	Value.	Acres.	Bshls.	Value.
Alachua.....				1,505	22,740	\$21,989 00
Baker.....				392	4,637	4,637 00
Bradford.....				2,715	53,832	53,832 00
Brevard.....				1	20	20 00
Calhoun.....						
Citrus.....				122	3,980	2,085 00
Clay.....	6	5	90 00	43	397	697 00
Columbia.....				3,348	56,983	56,983 00
Dade.....						
DeSoto.....				5	125	275 00
Duval.....	11	14	286 00	21	1,679	2,982 75
Escambia.....				1	20	20 00
Franklin.....						
Gadsden.....				1,832	26,016	19,141 00
Hamilton.....				2,420	37,451	37,451 00
Hernando.....				245	5,371	21,694 00
Hillsborough.....				107	1,788	1,789 20
Holmes.....		1	10 00	798	11,640	11,640 00
Jackson.....				5,344	52,440	36,362 00
Jefferson.....				4,237	63,610	63,610 00
Lafayette.....				1,078	9,983	9,983 00
Lake.....	16	225	450 00	21	462	714 00
Lee.....				2	45	90 00
Leon.....	46	200	1,820 00	966	33,633	27,785 50
Levy.....	1	1	10 00	733	8,825	8,787 50
Liberty.....				202	2,021	2,046 00
*Madison.....						
Manatee.....						
Marion.....				1,509	32,595	19,319 00
Monroe.....						
Nassau.....				10	1,136	2,265 00
Orange.....	2	4	70 00	12	1,079	820 00
Osceola.....	1	1	20 00			
Pasco.....				22	223	451 00
Polk.....				4	50	104 00
Putnam.....				22	388	396 00
St. Johns.....	1	1	10 00			
Santa Rosa..	1	2	30 00	35	463	463 00
Sumter.....	7	15	270 00	942	15,635	15,463 00
Suwannee.....				1,056	10,560	10,560 00
Taylor.....				605	8,205	8,975 50
Volusia.....						
Wakulla.....				605	9,562	9,575 00
Walton.....	1	1	20 00	267	4,670	4,642 00
Washington.....				69	1,105	760 00
Totals.....	93	470	\$3,086 00	31,296	483,369	\$458,407 45

\*No report.



## CROPS. Continued.

OATS.			SWEET POTATOES		
Acres.	Bushels.	Value.	Acres.	Bushels.	Value.
2,860	27,834	\$15,333 00	487	84,640	\$32,660 00
92	775	387 00	102	18,050	5,584 00
2,859	31,042	17,579 00	657	71,669	28,517 00
13	190	108 00	60	7,411	5,289 00
221	6,780	3,390 00	129	15,765	8,000 00
372	5,829	4,873 00	261	47,685	47,660 00
352	2,846	1,421 00	274	34,457	17,229 00
4,422	38,115	28,200 00	636	56,803	22,606 40
.....	.....	.....	467	32,028	20,724 00
77	1,872	1,645 70	736	62,010	36,250 80
152	2,545	972 50	959	67,105	34,643 50
.....	.....	.....	56	9,900	5,025 00
2,520	24,375	15,159 25	654	57,817	25,426 00
1,574	13,731	13,731 00	360	39,229	12,077 00
139	1,335	944 00	171	22,823	8,200 00
40	355	209 00	411	37,054	14,368 60
446	3,022	1,509 00	271	16,163	7,836 67
2,677	26,750	18,871 00	431	81,769	31,781 00
4,030	64,205	64,225 00	752	70,130	28,607 00
1,473	11,843	11,843 00	298	31,291	14,391 00
76	740	771 50	157	12,630	6,672 35
24	430	325 00	95	10,645	5,320 00
44,793	81,827	42,025 50	1,559	237,594	110,704 00
1,532	13,763	10,647 00	166	10,621	4,861 10
680	5,751	3,029 00	172	9,916	5,194 00
.....	.....	.....	195	18,835	8,221 00
1,803	18,181	18,016 00	500	50,465	25,797 00
.....	.....	.....	39	1,720	1,102 00
151	1,155	743 00	529	48,342	28,451 00
30	295	148 00	627	61,246	31,461 00
2	20	20 00	53	16,831	3,859 00
169	1,785	1,015 00	133	22,440	10,862 00
11	20	30 00	386	42,149	17,256 00
80	1,620	785 00	603	43,265	24,540 00
25	300	158 00	192	14,336	11,022 00
84	451	415 00	564	27,399	13,778 00
1,318	10,414	9,906 49	432	34,738	16,800 20
1,954	19,090	12,035 00	305	28,718	12,845 00
350	2,738	2,611 00	182	25,188	11,078 70
.....	.....	.....	100	25,320	6,784 00
484	3,284	2,990 00	78	9,414	4,704 00
1,424	15,401	14,092 00	304	32,325	13,593 00
209	2,225	1,375 00	318	60,575	29,285 00
79,518	442,838	\$321,537 94	15,861	1,708,451	\$811,061 32

## No. 2. VEGETABLES AND

COUNTIES.	IRISH POTATOES.			BEETS.		
	Acres.	Bushels.	Value.	Acres.	Crates.	Value.
Alachua .....	127	10,735	\$11,621 00	2	310	\$325 00
Baker .....						
Bradford .....	1	50	50 00			
Brevard .....	18	1,152	2,224 00			
Calhoun .....						
Citrus .....	7	1,550	1,650 00	2	215	160 00
Clay .....	6	258	258 00	1	70	115 00
Columbia .....						
Dade .....						
DeSoto .....	16	445	890 00			
Duval .....	182	9,797	15 970 32	8	295	863 50
Escambia .....	21	1,910	1,910 00			
Franklin .....						
Gadsden .....						
Hamilton .....						
Hernando .....	1	50	25 00			
Hillsborough .....	19	523	762 70	1	200	200 00
Holmes .....	6	418	418 00	1	65	65 00
Jackson .....						
Jefferson .....	22	1,493	1,493 00	22	1,843	921 50
LaFayette .....						
Lake .....	24	1,404	2,363 50	2	105	155 50
Lee .....	5	380	760 00			
Leon .....	15	845	1,055 00			
Levy .....	2	80	170 00			
Liberty .....						
*Madison .....						
Manatee .....				1	50	50 00
Marion .....	48	4,025	5,440 00	16	2,736	1,694 00
Monroe .....		5	11 00	13	628	693 70
Nassau .....	39	543	887 00	1	119	171 00
Orange .....	53	2,987	5,074 00	2	102	208 00
Osceola .....	2	75	123 00			
Pasco .....	2	92	184 00			
Polk .....						
Putnam .....	42	3,440	4,780 00			
St. Johns .....	2	113	179 00			
Santa Rosa .....	7	145	150 00			
Sumter .....	26	1,563	2,292 60	40	4,125	2,904 00
Suwannee .....						
Taylor .....						
Volusia .....						
Wakulla .....						
Walton .....	16	942	1,408 00	2	2	700
Washington .....						
Total .....	710	45,020	62 149 12	114	10,865	\$8,532 70

\*No report.

## GARDEN PRODUCTS.

CABBAGES.			TOMATOES		
Acres.	Barrels.	Value.	Acres.	Boxes.	Value.
1,103	77,833	\$83,303 00	1,240	81,590	\$38,280 00
11	60	73 00	3	100	112 00
67	8,302	7,740 00	154	16,406	27,307 00
35	5,730	8,460 00	5	1,155	1,515 00
9	464	1,462 00	4	327	460 00
13	450	722 00	1	15	26 00
20	450	880 00	78	17,196	10,977 00
208	36,342	34,148 00	65	4,226	7,404 70
21	2,500	5 320 00	206	22,388	28,098 70
1	40	120 00	1	200	150 00
28	700	670 00	1	20	20 00
23	588	1,464 50	31	2,541	2,248 20
7	565	1,965 00	1	174	134 00
30	2,540	2,531 00	32	2,655	1,327 50
148	13,649	12,211 50	887	58,324	58,187 00
18	1,630	4,225 00	144	12,880	19,200 00
7	448	942 00	10	1,300	1,300 00
2	30	80 00	18	1,610	1,344 00
2	65	125 00	192	7,585	11,425 00
141	15,382	8,508 10	279	34,660	28,861 00
97	2,026	4,501 75	230	107,808	47,642 00
9	1,781	2,216 00	4	223	317 00
56	8,725	6,550 00	253	17,731	22,822 00
7	617	709 00	4	380	552 00
7	97	728 00	2	151	302 00
86	1,623	3,611 00	17	1,295	1,290 00
1	50	75 00	8	595	407 00
4	25	70 00			
505	35,572	14,222 25	226	28,142	13,331 60
14	1,004	2,386 00	2	119	185 50
2	100	300 00			
2,582	219,388	210,319 60	4,098	421,746	325,226 20

## No. 2. VEGETABLES AND

COUNTIES.	SQUASHES.			EGG PLANT.		
	Acres.	barrels.	Value	Acres.	Barrel.	Value.
Alachua .....	57	3,960	9,045 00	18	1,215	\$3,080 00
Baker .....						
Bradford .....	2	30	60 00			
Brevard .....	1	84	170 00	1	3	265 00
Calhoun .....						
Citrus .....	2	480	620 00			
Clay .....	1	13	40 00	1	3	9 00
Columbia .....		1	3 00			
Dade .....						
DeSoto .....						
Duval .....	7	203	667 00	2	54	270 00
Escambia .....	1	50	50 00	1	10	50 00
Franklin .....						
Gadsden .....						
Hamilton .....						
Hernando .....				6	347	380 00
Hillsborough .....	7	185	243 00	5	352	1,142 00
Holmes .....	1	188	368 00	1	10	35 50
Jackson .....						
Jefferson .....	26	2,448	2,448 00	20	1,661	4,983 00
Lafayette .....						
Lake .....	39	2,317	1,901 00		5	15 00
Lee .....	1	10	20 00	6	255	1,930 00
Leon .....	1	55	70 00	14	300	1,500 00
Levy .....	1	39	58 00			
Liberty .....						
*Madison .....						
Manatee .....				1	41	120 00
Marion .....	20	1,410	1,660 00	1	60	108 00
Monroe .....				9	134	412 50
Nassau .....	7	266	616 00	1	5	40 00
Orange .....	5	90	185 00	1	50	125 00
Osceola .....		5	10 00			
Pasco .....	6	260	130 00	3	62	490 00
Polk .....				1	20	40 00
Putnam .....	7	250	747 00	5	100	408 00
St Johns .....						
Santa Rosa .....						
Sumter .....	14	658	820 00	4	452	570 00
Suwannee .....						
Taylor .....						
Volusia .....						
Wakulla .....						
Walton .....	13	268	602 00		2	10 00
Washington .....						
Total .....	219	13,270	\$20,533 00	101	5,168	\$15,933 00

\*No report.

**GARDEN PRODUCTS. Continued.**

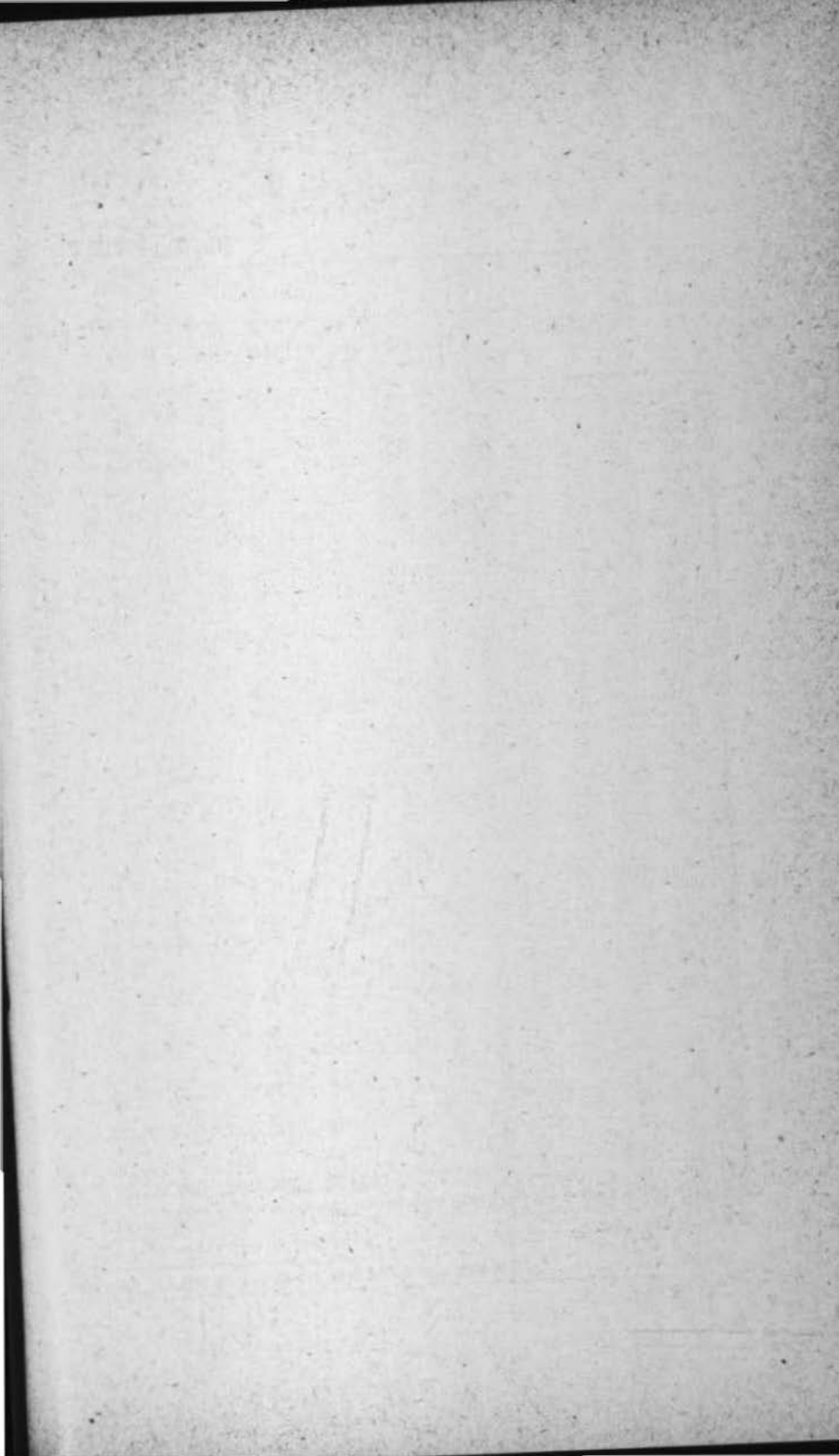
CUCUMBERS.			BEANS.		
Acres.	Crates.	Value.	Acres.	Crates.	Value.
213	23,298	\$26,175 00	357	25,780	\$33,492 00
.....	.....	.....	1	15	20 00
2	100	75 00	2	60	70 00
1	60	300 00	166	19,679	39,885 00
.....	.....	.....	.....	.....	.....
4	1,160	1,760 00	5	1,200	1,570 00
1	78	90 50	5	266	384 50
.....	5	7 00	9	290	392 00
.....	.....	.....	.....	.....	.....
16	75	1,467 00	18	952	1,373 00
101	12,261	19,079 50	24	5,635	7,538 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	9	1,170	1,170 00
8	863	1,494 75	6	163	181 00
1	440	440 00	3	921	921 00
.....	.....	.....	.....	.....	.....
220	2,540	1,270 00	7	1,912	956 00
.....	.....	.....	.....	.....	.....
3	288	313 00	121	7,966	9,316 00
7	425	1,000 00	14	455	910 00
1	110	110 00	1	180	180 00
27	2,834	2,816 00	4	412	862 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
3	275	275 00	3	280	180 00
22	2,587	1,649 00	86	6,713	6,499 00
.....	.....	.....	.....	.....	.....
1	23	37 00	2	368	243 00
2	307	442 00	14	1,188	2,229 00
.....	.....	.....	3	346	648 00
1	70	149 00	2	150	360 00
.....	.....	.....	.....	10	10 00
11	1,380	1,380 00	2	80	180 00
.....	8	16 00	.....	20	20 00
.....	.....	.....	2	50	50 00
59	6,191	3,135 00	39	3,254	1,982 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
4	286	258 00	12	1,106	1,201 00
.....	.....	.....	.....	.....	.....
798	56,339	\$63,738 75	977	80,616	\$112,822 50



## No. 2. Vegetables and Garden Products. Continued.

COUNTIES.	WATERMELONS.			ENGLISH PEAS.		
	Acres	Car Loads.	Value.	Acres.	Crates	Value.
Alachua.....	77	83	\$11,050 00	10	970	\$1,030 00
Baker.....				2	95	180 00
Bradford.....	50	128	1,002 00	7	207	212 00
Brevard.....	5	5	300 00			
Calhoun.....						
Citrus.....	11	2	1,450 00			
Clay.....	72	59	2,892 50	4	159	178 50
Columbia.....	283	141	4,177 00	24	639	1,215 50
Dade.....						
DeSoto.....	330	93	3,232 00			
Duval.....	282	284	27,134 00	15	216	1,235 00
Escambia.....	35	35	3,525 00			
Franklin.....						
Gadsden.....						
Hamilton.....	229	58	5,800 00			
Hernando.....						
Hillsborough..	89	27	3,393 00	7	178	173 50
Holmes.....	164	100	7,054 50	1	84	64 00
Jackson.....						
Jefferson.....	300	301	17,286 50	22	1,949	974 50
Lafayette.....						
Lake.....	21	10	315 00	4	159	299 00
Lee.....	2	1	100 00			
Leon.....	137	138	12,000 00			
Levy.....						
Liberty.....						
*Madison.....						
Manatee.....	3	3	300 00			
Marion.....	7	4	225 00	14	426	500 00
Monroe.....	99	36	5,404 50	1	15	18 00
Nassau.....	128	87	4,416 00	1	45	105 00
Orange.....	103	18	4,112 00	3	80	420 00
Osceola.....	3	2	365 00			
Pasco.....	18	15	1,630 00	1	70	35 00
Polk.....						
Putnam.....	99	89	7,397 00		10	10 00
St. Johns.....	8	9	440 00			
Santa Rosa....	9	5	405 00	4	100	100 00
Sumter.....	199	57	3,270 00	1	80	100 00
Suwannee.....						
Taylor.....						
Volusia.....	12	15	750 00			
Wakulla.....						
Walton.....	64	67	5,518 00	2	94	100 00
Washington....	58	23	1,625 00			
Totals.....	2,897	1,895	\$136,569 00	123	5,576	\$6,950 00

\*No report.



## No. 3. FRUIT

COUNTIES.	ORANGES.			
	Bearing Trees.	Non-Bearing Trees.	No. of Boxes of 126.	Value.
Alachua.....	79,789	138,311	181,263	\$187,570 00
Baker.....	322	1,547	796	569 00
Bradford.....	17,439	38,456	35,506	35,506 00
Brevard.....	99,486	201,611	165,532	293,330 00
Calhoun.....	2,520		12,900	12,900 00
Citrus.....	68,243	112,185	124,600	126,190 00
Clay.....	15,322	50,098	15,128	14,186 32
Columbia.....	3,903	15,193	10,198	11,055 00
Dade.....		3,248		
DeSoto.....	36,910	70,326	80,972	42,059 40
Duval.....	71,848	51,149	127,041	152,297 45
Escambia.....	80		45	90 00
Franklin.....	2,158	1,427	2,279	3,712 00
Gadsden.....				
Hamilton.....	17		50	100 00
Hernando.....	21,521	113,912	38,264	32,054 50
Hillsborough.....	99,471	189,921	124,042	100,445 72
Holmes.....				
Jackson.....				
Jefferson.....				
Lafayette.....				
Lake.....	218,130	687,102	317,641	298,528 04
Lee.....	8,520	16,904	8,481	12,871 00
Leon.....	300	450	10	20 00
Levy.....	7,374	16,859	20,277	10,562 00
Liberty.....	222	280	660	1,585 00
*Madison.....				
Manatee.....	16,043	25,411	25,806	16,526 50
Marion.....	171,610	380,486	372,686	311,947 48
Monroe.....	241	213	205	299 00
Nassau.....	511	4,365	1,584	3,168 00
Orange.....	682,908	731,961	759,815	755,290 00
Osceola.....	4,371	11,096	7,363	5,423 00
Pasco.....	19,587	58,870	33,127	27,457 00
Polk.....	30,624	159,260	64,101	63,880 00
Putnam.....	230,065	328,425	328,611	673,958 00
St. Johns.....	26,859	29,440	32,862	32,933 00
Santa Rosa.....				
Sumter.....	90,130	413,138	129,101	47,375 23
Suwannee.....				
Taylor.....	31	63	22	25 00
Volusia.....	395,928	142,433	564,596	564,596 00
Wakulla.....				
Walton.....	2	50	3	8 00
Washington.....	4	100		
Totals.....	2,422,489	4,494,290	3,585,564	\$3,838,517 64

\*No report.



## No. 3. FRUIT

COUNTIES.	LEMONS.			
	Bearing Trees.	Non- Bearing Trees.	No. of Boxes.	Value.
Alachua .....				
Baker .....				
Bradford .....	1	4	2	3 00
Brevard .....	1,697	21,951	1,734	3,155 00
Calhoun .....				
Citrus .....	680		1,845	4,590 00
Clay .....	108	80	30	39 90
Columbia .....	1	1	1	1 00
Dade .....		2,391		
DeSoto .....	52	90	193	154 60
Duval .....	37	26	25	107 00
Escambia .....	2		5	10 00
Frauklin .....				
Gadsden .....				
Hamilton .....				
Hernando .....	50	1,175	11	20 00
Hillsborough .....	4,259	13,724	2,835	5,299 50
Holmes .....				
Jackson .....				
Jefferson .....				
LaFayette .....				
Lake .....	1,788	3,145	2,097	3,534 35
Lee .....	549	6,429	869	1,467 00
Leon .....				
Levy .....	1	15		
Liberiy .....				
*Madison .....				
Manatee .....	557	920	389	712 00
Marion .....	3,286	8,208	2,279	4,989 00
Monroe .....	414	32	164	179 25
Nassau .....	15	21	18	34 66
Orange .....	10,055	7,912	11,710	14,944 00
Osceola .....	87	19	185	232 00
Pasco .....	663	3,061	230	230 00
Polk .....	7	800	2	2 00
Putnam .....	3,113	5,867	2,982	4,185 00
St. Johns .....	19	60	5	5 00
Santa Rosa .....				
Sumter .....	4,990	18,692	3,975	6,454 00
Suwannee .....				
Taylor .....				
Volusia .....				
Wakulla .....				
Walton .....				
Washington .....				
Totals .....	32,431	94,623	31,586	\$50 348 26

\*No report.



## CROPS. Continued.

PEARS.			PEACHES.		
Trees.	Barrels.	Value.	Tre s.	Bushels.	Value.
4,777	1,818	\$1,840 00	4,495	1,398	\$1,348 00
2,947	56	138 00	9,912	4,302	3,858 00
7,141	3,388	6,949 00	14,484	14,586	14,593 00
.....	.....	.....	205	152	305 00
.....	.....	.....	110	30	40 00
20,232	323	924 00	13,164	1,678	3,203 50
6,101	711	1,471 50	10,809	5,934	5,423 50
.....	.....	.....	.....	.....	.....
110	30	120 00	114	75	201 06
8,872	1,161	6,300 00	10,751	3,705	6,369 60
17,143	952	2,816 00	9,607	1,625	3,340 00
579	83	200 00	1,079	512	762 00
1,764	441	983 75	737	27	16 00
814	703	1,606 00	2,133	3,084	3,084 00
18	1	3 00	355	.....	.....
229	18	46 00	775	215	407 38
3,995	57	239 00	13,307	1,385	1,494 00
6,976	2,051	2,425 00	8,818	1,235	1,175 00
35,152	4,484	13,452 00	9,735	2,557	2,557 00
.....	.....	.....	20	45	45 00
1,819	28	72 00	6,682	1,215	1,914 00
.....	.....	.....	.....	.....	.....
40,183	7,061	14,891 00	23,678	4,616	3,827 00
442	17	38 00	921	1,009	860 50
24	9	26 00	3,617	206	108 00
.....	.....	.....	.....	.....	.....
13,385	30	93 00	13,085	790	924 00
.....	.....	.....	.....	.....	.....
4,755	137	411 00	10,712	3,120	6,240 00
424	63	137 00	14,565	3,443	4,184 00
90	.....	.....	15	.....	.....
543	.....	.....	1,594	.....	.....
.....	.....	.....	.....	.....	.....
1,843	41	172 00	3,644	1,265	1,293 00
1,382	25	104 00	3,454	512	613 00
35	9	41 00	90	90	80 00
3,164	35	180 00	4,992	618	1,399 00
.....	.....	.....	.....	.....	.....
856	106	280 50	1,161	987	939 00
.....	.....	.....	280	230	240 00
2,119	82	146 00	2,576	264	264 00
8,032	221	499 00	24,263	12,115	11,762 00
3,225	1,225	1,650 00	800	1,700	600 00
199,176	25,366	\$58,253 75	226,739	74,725	\$83,464 54

## No. 3. FRUIT

COUNTIES.	COCOANUTS.			STRAWBERRIES.		
	Trees.	Nuts.	Value.	Ac's.	Quarts.	Value.
Alachua .....				266	342,305	\$87 352 00
Baker .....						
Bradford .....				223	318,815	26,372 00
Brevard .....	631	560	56 00	2	1,000	300 00
Calhoun .....						
Citrus .....				3	1,100	240 00
Clay .....				26	29,252	2 993 20
Columbia .....				1	150	
Dade .....	49,285	25,700	1 043 00			
DeSoto .....				10	1,884	758 30
Duval .....				204	275,312	30,060 70
Escambia .....				18	500	50 00
Franklin .....						
Gadsden .....						
Hamilton .....						
Hernando .....						
Hillsborough .....				6	2,860	2,889 00
Holmes .....					36	8 00
Jackson .....				1	100	10 00
Jefferson .....						
LaFayette .....						
Lake .....				6	2,050	222 00
Lee .....	4,438	4,350	376 00	1	1,300	280 00
Leon .....				2	5,100	820 00
Levy .....						
Liberty .....						
*Madison .....						
Manatee .....					30	15 00
Martin .....				2	3,260	550 00
Monroe .....	1,114	11,300	227 00			
Nassau .....					65	20 00
Orange .....				3	2,211	415 00
Osceola .....					12	3 00
Pasco .....				7	2,200	605 00
Polk .....						
Putnam .....				20	30,655	3,660 00
St. Johns .....				17	19,510	3,188 00
Santa Rosa .....						
Sumter .....				18	10,410	1,351 00
Suwannee .....						
Taylor .....						
Volusia .....				3	4,200	885 00
Wakulla .....						
Walton .....				1	400	65 00
Washington .....						
Totals .....	55,468	41,910	\$1,702 00	840	1,054,717	\$163,212 10

\*No report.

**CROPS. Continued.**

LIMES.			GRAPE FRUIT.		
Trees	Boxes	Value.	Trees	Barrels	Value.
.....	.....	.....	83	415	\$735 00
.....	.....	.....	10	31	99 30
646	343	486 00	132	50	167 00
.....	.....	.....	.....	.....	.....
15	3	3 00	81	49	144 50
2,831	.....	.....	51	91	217 33
64	207	347 00	722	2,072	4,047 00
1	2	5 00	72	51	33 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	104	108	218 00
481	4	6 00	962	2,020	5,143 36
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
658	130	26 50	712	632	1,244 00
4 751	630	1,140 00	256	127	420 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	91	255	408 50
.....	.....	.....	.....	.....	.....
80	81	190 00	294	298	598 25
51	1	2 00	450	54	123 69
6,234	7,906	3,234 00	.....	.....	.....
3	.....	.....	3	3	10 00
237	55	60 00	2,232	875	2,047 50
8	.....	.....	36	18	36 00
131	.....	.....	1,092	182	298 00
124	.....	.....	569	602	828 00
365	.....	.....	1,342	153	367 00
.....	.....	.....	6	.....	.....
.....	.....	.....	.....	.....	.....
14	13	36 00	2,823	658	1,442 00
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....
16,694	9,375	\$5,535 50	12,123	8,744	\$18,626 93

## NO. 4 LIVE

COUNTIES.	HORSES		MULES	
	No.	Value.	No.	Value.
Alachua.....	2,412	\$207,132 00	1,031	\$94,177 00
Baker.....	166	11,075 00	39	3,255 00
Bradford.....	1,178	96,318 00	159	15,557 00
Brevard.....	165	16,390 00	66	6,815 00
Calhoun.....	277	18,490 00	10	800 00
Citrus.....	422	23,165 00	123	10,260 00
Clay.....	430	26,130 00	68	4,365 00
Columbia.....	1,332	93,405 00	738	100,175 00
Dade.....	36	2,740 00	10	900 00
DeSoto.....	752	6,496 00	20	1,945 00
Duval.....	616	57,490 00	314	22,755 00
Escambia.....	1,066	86,620 00	106	14,275 00
Franklin.....	62	5,140 00		
Gadsden.....	1,197	67,845 00	141	8,110 00
Hamilton.....	966	75,362 00	704	69,425 00
Hernando.....	415	31,180 00	50	4,285 00
Hillsborough.....	1,003	76,165 00	99	10,460 00
Holmes.....	446	23,335 00	81	5,759 00
Jackson.....	2,137	146,070 00	612	43,255 00
Jefferson.....	562	41,485 00	1,551	97,075 00
Lafayette.....	345	23,997 00	153	14,810 00
Lake.....	863	50,190 00	194	12,910 00
Lee.....	265	23,055 00	21	2,530 00
Leon.....	1,709	119,020 00	1,266	94,335 00
Levy.....	591	30,524 00	35	2,483 00
Liberty.....	139	8,385 00	23	1,605 00
*Madison.....				
Manatee.....	203	16,235 00	5	675 00
Marion.....	1,620	90,450 00	227	20,325 00
Monroe.....				
Nassau.....	521	47,900 00	56	7,355 00
Orange.....	1,637	145,550 00	482	45,541 00
Oceola.....	283	16,978 00	94	5,650 00
Pasco.....	324	16,035 00	21	1,542 00
Polk.....	1,245	73,452 00	22	1,730 00
Putnam.....	782	50,326 00	160	12,070 00
St. Johns.....	538	18,590 00	96	5,135 00
Santa Rosa.....	592	25,940 00	8	540 00
Sumter.....	851	41,621 00	222	8,605 00
Suwannee.....	1,463	87,901 00	409	23,780 00
Taylor.....	311	18,607 00	87	6,150 00
Volusia.....	1,540	113,595 00	26	855 00
Wakulla.....	424	25,395 00	88	6,280 00
Walton.....	421	26,745 00	62	6,040 00
Washington.....	637	36,665 00		
Total.....	32,944	\$2,219,089 00	8,678	\$794,594 00

\*No Report.

**STOCK.**

JACKS AND JENNETS.		STOCK CATTLE.		SHEEP	
No.	Value	No.	Value.	No	Value.
9	\$640 00	19,480	\$161,623 00	3,385	\$6,300 00
.....	.....	2,158	12,958 00	439	554 00
1	300 00	10,770	65,035 00	1,838	2,130 00
1	20 00	6,994	36,535 00	.....	.....
1	25 00	6,300	32,272 00	3,032	5,075 00
.....	.....	8,566	59,393 00	1,600	2,400 00
.....	.....	7,387	37,565 00	120	140 00
1	25 00	13,052	76,995 00	1,029	1,693 00
.....	.....	84	1,080 00	.....	.....
.....	.....	54,844	194,440 00	2,656	5,549 00
13	78 00	4,076	42,107 00	30	60 00
4	100 00	6,566	40,289 00	11,828	16,840 00
.....	.....	1,470	7,360 00	107	187 00
.....	.....	6,621	34,296 00	1,176	1,176 00
.....	.....	8,562	43,341 00	1,255	1,876 00
.....	.....	3,855	18,376 00	877	1,538 00
1	25 00	13,871	81,435 00	2,903	6,663 00
1	30 00	6,589	33,193 00	13,436	20,566 00
3	225 00	13,171	66,390 00	5,827	7,286 00
.....	.....	4,732	44,285 00	827	827 00
.....	.....	2,406	11,650 00	.....	.....
2	65 00	4,356	24,093 00	21	25 00
.....	.....	47,129	192,930 00	.....	.....
3	475 00	10,710	67,850 00	1,204	2,290 00
.....	.....	4,453	20,801 00	339	390 00
.....	.....	3,772	18,836 00	573	1,027 00
.....	.....	.....	.....	.....	.....
1	50 00	4,244	21,277 00	1,583	3,286 00
.....	.....	13,311	66,900 00	3,924	7,704 00
.....	.....	.....	.....	.....	.....
.....	.....	8,489	89,643 00	3,031	6,692 00
2	90 00	16,769	87,759 00	40	120 00
.....	.....	12,285	189,325 00	200	300 00
.....	.....	3,938	20,695 00	320	600 00
1	50 00	24,608	116,101 00	2,061	3,924 00
3	150 00	9,987	76,416 00	.....	.....
.....	.....	6,067	30,239 00	80	95 00
.....	.....	8,031	48,124 00	14,653	29,364 00
24	770 00	9,250	48,094 00	1,263	2,155 00
1	40 00	10,824	54,895 00	250	195 00
2	50 00	11,882	59,577 00	100	100 00
2	65 00	13,943	69,040 00	1,365	2,035 00
1	20 00	6,936	31,310 00	155	155 00
1	100 00	6,418	34,337 00	24,240	44,668 00
.....	.....	10,645	56,840 00	6,177	9,213 00
78	\$3,393 00	449,599	\$2,525,000 00	113,974	\$195,203 00



## No. 4. LIVE STOCK. Continued.

COUNTIES.	GOATS.		HOGS.	
	No.	Value.	No.	Value.
Alachua.....	285	\$395 00	9,883	\$24,791 00
Baker.....	301	290 00	3,227	3,247 00
Bradford.....	995	739 00	13,990	14,874 00
Brevard.....			1,384	1,890 00
Calhoun.....	381	211 00	4,157	4,109 00
Citrus.....	90	140 00	2,193	4,362 00
Clay.....	142	124 00	4,168	4,163 00
Columbia.....	701	444 00	11,788	45,479 00
Dade.....			8	50 00
D. Soto.....	12	10 00	4,625	4,625 00
Duval.....	12	30 00	3,439	13,569 00
Escambia.....	1,334	700 00	4,849	5,292 00
Franklin.....	329	174 00	390	568 00
Gadsden.....	576	285 00	5,846	5,875 00
Hamilton.....	815	815 00	16,758	33,614 00
Hernando.....	660	621 00	1,962	3,394 00
Hillsborough.....	263	400 00	8,176	8,674 00
Holmes.....	403	206 00	8,065	8,098 00
Jackson.....	840	516 00	19,785	20,223 00
Jefferson.....	581	381 00	7,865	34,835 00
Lafayette.....	25	25 00	10,045	10,045 00
Lake.....	77	125 00	1,236	1,814 00
Lee.....			1,848	3,118 00
Leon.....	1,021	606 00	11,806	33,675 00
Levy.....	243	219 00	3,407	3,791 00
Liberty.....	179	90 00	2,128	2,470 00
*Madison.....				
Manatee.....	28	28 00	1,197	1,189 00
Marion.....	1,905	1,816 00	7,177	7,217 00
Monroe.....				
Nassau.....	174	131 00	3,951	9,087 00
Orange.....	4	21 00	3,026	5,720 00
Osceola.....			1,153	1,170 00
Pasco.....	40	40 00	2,533	2,533 00
Polk.....			6,502	6,502 00
Putnam.....	2	10 00	4,199	9,543 00
St. Johns.....	12	8 00	1,331	1,301 00
Santa Rosa.....	607	312 00	3,623	1,996 00
Sumter.....	237	292 00	5,432	5,573 00
Suwannee.....	630	380 00	6,950	6,950 00
Taylor.....	145	77 00	649	6,755 00
Volusia.....			3,189	3,340 00
Wakulla.....	180	95 00	5,842	5,931 00
Walton.....	324	195 00	3,633	3,637 00
Washington.....	1,215	619 00	5,730	6,326 00
Totals.....	15,768	\$11,770 00	229,145	\$381,395 00

\*No Report.



COUNTIES.	CHICKENS.		EGGS SOLD AND USED.	
	No.	Value.	No. Doz.	Value.
Alachua.....	30,910	\$7,863 00	44,130	\$12,758 00
Baker.....	7,348	2,236 00	11,299	1,708 00
Bradford.....	35,186	7,924 00	68,634	8,361 00
Brevard.....	3,679	1,759 00	36,441	7,691 00
Calhoun.....	3,753	972 00	8,341	892 00
Citrus.....	1,930	618 00	4,100	1,589 00
Clay.....	12,692	5,076 00	40,956	8,191 00
Columbia.....	43,046	10,648 00	55,518	8,466 00
Dade.....	1,207	706 00	3,225	1,075 00
DeSoto.....	6,004	3,222 00	17,110	3,856 00
Duval.....	34,096	12,842 00	178,137	30,430 00
Escambia.....	39,233	10,181 00	81,700	11,415 00
Franklin.....	14,114	2,823 00	.....	.....
Gadsden.....	18,129	4,495 00	50,927	5 092 00
Hamilton.....	34,695	8,577 00	43,469	5 301 00
Hernando.....	5,503	1,536 00	14,059	2 536 00
Hillsborough.....	24,245	12,947 00	161,168	22 821 00
Holmes.....	19,229	4,642 00	20,244	2 016 00
Jack-on.....	41,694	8,421 00	83,408	17 540 00
Jefferson.....	51,495	13,401 00	79,726	14 120 00
Lafayette.....	1,363	796 00	2,235	442 00
Lake.....	14,517	5,165 00	65,468	14,077 00
Lee.....	4,310	2,155 00	30,562	7,426 00
Leon.....	144,672	33,817 00	197,895	24 855 00
Levy.....	7,781	2,988 00	18,908	2,655 00
Liberty.....	1,951	427 00	2,639	308 00
*Madison.....	.....	.....	.....	.....
Manatee.....	1,733	439 00	3,308	502 00
Marion.....	23,224	7,523 00	12,333	24,519 00
Monroe.....	.....	.....	.....	.....
Nas-au.....	18,511	5,325 00	44,935	10,300 00
Orange.....	44,331	21,103 00	110,641	21,353 00
Osceola.....	1,894	953 00	1,430	428 00
Pasco.....	4,021	918 00	2,596	563 00
Polk.....	4,220	998 00	6,599	1,353 00
Putnam.....	22,949	9,252 00	64,282	18,264 00
St. Johns.....	9,091	4,528 00	32,160	5,994 00
Santa Rosa.....	15,321	3,780 00	.....	.....
Sumter.....	27,151	6,632 00	57,007	13,381 00
Suwannee.....	20,245	3,058 00	25,290	3,058 00
Taylor.....	7,709	1,822 00	11,725	1,172 00
Volusia.....	16,797	8,319 00	705	207 00
Wakulla.....	20,825	4,966 00	28,098	3,163 00
Walton.....	10,231	2,438 00	50,505	5,667 00
Washington.....	6,584	1,602 00	50	5 00
Total.....	857,619	\$249,893 00	1,772,013	\$325,407 00

\*No report.

## POULTRY.

DUCKS.		GEESE.		TURKEYS.	
No.	Value.	No.	Value.	No.	Value.
529	\$163 00	1,050	\$536 00	2,748	\$2,247 00
18	11 00	1,410	986 00	144	144 00
793	353 00	4,707	2,439 00	1,630	1,348 00
67	72 00			144	174 00
176	88 00	430	218 00	335	335 00
40	16 00				
299	150 00	427	315 00	345	361 00
120	61 00	2,014	1,005 00	1,312	1,042 00
81	81 00	229	229 00	247	247 00
230	119 00	84	79 00	192	281 00
149	64 00	149	64 00	252	252 00
44	17 00	75	55 00	85	77 00
397	201 00	589	305 00	779	764 00
75	28 00	3,607	1,770 00	842	701 00
33	17 00	34	29 00	99	99 00
170	113 00	169	127 00	141	152 00
105	29 00	1,142	569 00	298	234 00
110	48 00	1,720	1,005 00	730	435 00
257	257 00	319	319 00	710	710 00
70	47 00	192	96 00	133	77 00
17	17 00	61	62 00	135	153 00
546	216 00	16	16 00		
13	3 00	627	325 00	3,035	2,973 00
44	14 00	492	344 00	194	159 00
		28	14 00	126	122 00
11	66 00	36	36 00	11	11 00
99	94 0	305	305 00	972	1,004 00
146	83 00	417	359 00	187	250 00
167	95 00	9	9 00	689	782 00
2	10 00	4	4 00	7	7 00
21	12 00	147	147 00	26	26 00
15	3 00	53	45 00	48	50 00
190	89 00	71	71 00	700	625 00
113	70 00	35	35 00	58	60 00
231	134 00	345	245 00	487	349 00
226	143 00	724	442 00	736	736 00
112	54 00	318	159 00	100	100 00
4	1 00	293	143 00	38	26 00
		9	9 00	47	51 00
22	8 00	50	20 00	83	83 00
227	89 00	1,006	499 00	738	582 00
5,959	\$3,136 00	23,393	\$13,435 00	19,583	\$17,829 00

## No. 6. DAIRY

COUNTIES.	MILCH COWS.	
	No.	Value.
Alachua.....	868	\$17,555 00
Baker.....	1,149	9,232 00
Bradford.....	2,877	25,374 00
Brevard.....	262	4,930 00
Calhoun.....		
Citrus.....	141	1,210 00
Clay.....	2,086	41,724 00
Columbia.....	2,717	27,611 00
Dade.....	6	315 00
DeSoto.....	701	5,155 00
Duval.....	962	28,088 00
Escambia.....	192	1,980 00
Franklin.....	143	1,590 00
Gadsden.....	972	9,805 00
Hamilton.....	2,578	18,697 00
Hernando.....	481	5,500 00
Hillsborough.....	3,401	17,956 00
Holmes.....	1,639	16,840 00
Jackson.....	3,391	34,180 00
Jefferson.....	1,192	12,894 00
Lafayette.....	10	50 00
Lake.....	369	4,636 00
Lee.....	583	9,310 00
Leon.....	3,586	186,195 00
Levy.....	1,682	16,362 00
Liberty.....		
*Madison.....		
Manatee.....		
Marion.....	32	932 00
Monroe.....		
Nassau.....	2,327	44,349 00
Orlando.....	896	27,310 00
Osceola.....	247	1,725 00
Pasco.....	34	350 00
Polk.....	144	1,044 00
Putnam.....	1,467	21,470 00
St. Johns.....	80	1,178 00
Santa Rosa.....		
Sumter.....	1,223	19,774 00
Suwannee.....		
Taylor.....	2,277	13,215 00
Volusia.....	53	820 00
Wakulla.....	884	3,460 00
Walton.....	955	9,020 00
Washington.....	26	545 00
Totals.....	41,633	\$642,381 00

\*No report.



**PRODUCTS.**

MILK.		BUTTER.		CHEESE.	
Gallons	Value.	Pounds.	Value.	Pounds.	Value.
119,165	\$44,662 00	17,390	\$4,406 00		
74,103	13,559 00	11,383	4,344 00	242	\$57 00
40,810	13,354 00	5,110	1,570 00		
6,800	670 00	220	96 00		
62,130	24 852 00	6,700	2,010 00	4	1 00
220,099	62,957 00	32,624	8,197 00		
500	200 00				
35,125	7,503 00	8,335	2,446 00		
86,924	31,290 00	1,309	381 00		
70,340	22,460 00	1 600	405 00		
138,365	28,246 00	36,467	9,103 00		
85,833	19,094 00	16,267	4,052 0		
29,660	4,740 00	4,962	1,688 00		
142,950	35,334 00	23,741	5,554 00		
111,344	34,193 00	25,361	6,357 00		
342,490	122,539 00	34,142	6,969 00	50	16 00
118,865	45,388 00	35,845	8,818 00		
46,108	15,523 00	7,158	2,123 00		
370,720	92,680 00	123,625	30,906 00	350	67 00
18,103	6,333 00	8,858	2,267 00		
9,457	2,833 00				
102,067	35,854 00	5,268	1,445 00		
289,500	118,941 00	6,437	2,093 00		
2,190	426 00				
7,600	1 740 00	1,510	381 00		
6,487	2,247 00	340	86 00		
27,851	16,422 00	9,140	2,710 00		
8,500	3,250 00	800	192 00		
145,655	55,525 00	47,206	17,379 00	1,000	400 00
27,508	2,775 00	3,353	808 00		
4,650	1,448 00	1,060	334 00		
11,266	2 723 00	2,945	637 00		
72,155	20,328 00	12,510	3,524 00		
7,750	1,875 00	100	25 00		
2,843,070	\$891,864 00	491,766	\$131,306 00	1,646	\$541 00

## No. 7. MISCELLANEOUS

COUNTIES.	WOOL.			FIGS.	
	Fleeces.	Pounds.	Value.	Bushels.	Value.
Alachua .....	1,295	2,875	\$ 902 00	.....	.....
Baker .....	298	669	130 50	.....	.....
Bradford .....	1,550	2,850	1,302 50	50	\$25 00
Brevard .....	.....	.....	.....	.....	.....
Calhoun .....	2,685	8,560	1,956 00	.....	.....
Citrus .....	.....	.....	.....	.....	.....
Clay .....	70	316	79 00	17	50 00
Columbia .....	1,001	2,403	530 60	59	61 00
Dade .....	.....	.....	.....	.....	.....
DeSoto .....	2,212	6,586	1,362 18	.....	.....
Duval .....	265	760	100 00	1,072	1,285 00
Escambia .....	6,962	21,505	5,044 75	200	200 00
Franklin .....	.....	.....	.....	126	249 00
Gadsden .....	1,229	3,430	787 10	.....	.....
Hamilton .....	681	1,845	410 00	3	6 00
Hernando .....	485	1,884	444 36	.....	.....
Hillsborough .....	1,911	5,225	1,005 70	.....	.....
Holmes .....	10,358	29,725	6,628 23	497	516 00
Jackson .....	4,327	12,113	2,249 00	.....	.....
Jefferson .....	.....	.....	.....	.....	.....
LaFayette .....	.....	.....	.....	.....	.....
Lake .....	.....	.....	.....	.....	.....
Lee .....	.....	.....	.....	.....	.....
Leon .....	585	2,380	382 20	484	476 00
Levy .....	75	215	30 50	10	10 00
Liberty .....	824	2,215	411 00	.....	.....
*Madison .....	.....	.....	.....	.....	.....
Manatee .....	.....	.....	.....	.....	.....
Marion .....	3,239	9,630	1,903 36	7	16 00
Monroe .....	.....	.....	.....	.....	.....
Nassau .....	1,751	5,020	1,113 00	15	15 00
Orange .....	.....	.....	.....	10	17 00
Osceola .....	.....	.....	.....	.....	.....
Pasco .....	225	460	185 00	30	50 00
Polk .....	.....	.....	.....	.....	.....
Putnam .....	.....	.....	.....	20	20 00
St. Johns .....	.....	.....	.....	.....	.....
Santa Rosa .....	15,563	43,638	9,385 00	.....	.....
Sumter .....	1,860	5,361	608 00	45	65 00
Suwannee .....	.....	.....	.....	.....	.....
Taylor .....	.....	.....	.....	8	24 00
Volusia .....	630	2,600	675 00	.....	.....
Wakulla .....	129	487	110 00	.....	.....
Walton .....	24,239	68,308	17,358 00	1,061	1,061
Washington .....	6,083	16,575	3,633 00	.....	.....
Total .....	90,532	257,635	\$58,725 98	3,714	\$4,140 00

\*No Report.

**PRODUCTS.**

GRAPE VINES.		WINE.		PLUMS.	
Acres.	Value.	Gallons.	Value.	Bushels.	Value.
2	\$350 00				
10	470 00	165	175 00	27	18 00
		310	286 00	559	943 00
3	800 00	500	500 00		
1	80 00			5	15 00
15	2,490 00	687	846 00	174	259 00
14	1,505 00	871	844 00	396	186 00
46	4,005 00	98	146 00	1,414	3,710 00
3	700 00	1,000	500 00		
				549	833 00
10	500 00	200	200 00		
12	1,880 00	927	1,459 00	399	457 00
2	30 00	202	202 00	73	139 00
25	1,701 00	259	378 00	31	31 00
11	420 00	28	42 00		
173	55,880 00	7,395	9,040 00	330	300 00
1	50 00	103	122 00		
7	710 00	270	270 00	3	10 00
24	2,733 00	660	770 00	1	3 00
494	148,525 00	655	1,435 00	228	53 00
2	40 00	110	250 00	44	44 00
4	400 00				
31	1,205 00	450	600 00	65	65 00
36	3,490 00	1,485	1,485 00	280	140 00
60	250 00	400	400 00		
12	235 00	64	126 00	44	62 00
1	266 00	256	256 00	15	7 00
10	1,265 00	123	200 00	5	5 00
36	1,705 00	470	750 00	1,175	1,668 00
36	900 00				
1,081	\$232,085 00	17,668	\$21,282 00	5,817	\$8,948 00

## No. 7. MISCELLANEOUS PRODUCTS. Continued.

COUNTIES.	HONEY.			Avocado Pears.
	Stands of Bees.	Pounds Honey.	Value.	
Alachua.....	152	1,635	\$ 171 00	Monroe County—Trees, 3,737; Barrels, 542; Value, \$1,605.
Baker.....	124	1,345	103 00	
Bradford.....	6	110	17 40	
Brevard.....	517	34,340	2,821 00	
Calhoun.....	1,100	78,000	4,720 00	
Citrus.....				
Clay.....	108	700	105 00	
Columbia.....	249	2,462	251 00	
Dade.....				
DeSoto.....	457	12,847	1,282 50	
Duval.....	342	10,640	4 853 50	
Escambia.....	885	23,950	2,395 00	
Franklin.....	230	5,700	570 00	
Gadsden.....	220	3,670	187 00	
Hamilton.....	480	4,824	404 00	
Hernando.....				
Hillsborough.....	175	2,211	458 35	
Holmes.....	724	9,866	500 20	
Jackson.....	128	1,280	154 00	
Jefferson.....				
Lafayette.....				
Lake.....	110	3,215	346 12	
Lee.....	239	10,070	836 00	
Leon.....	673	15,585	1,389 50	
Levy.....	40	565	66 00	
Liberty.....	881	17,492	880 00	
*Madison.....				
Manatee.....				
Marion.....	384	4,702	577 00	
Monroe.....				
Nassau.....	57	1,055	170 50	
Orange.....	356	8,745	1,107 00	
Osceola.....	3	75	18 00	
Pasco.....	29	515	125 00	
Polk.....				
Putnam.....	101	1,340	100 00	
St. Johns.....	17	450	85 00	
Santa Rosa.....	502	5,090	268 00	
Sumter.....	93	2,172	290 00	
Suwannee.....				
Taylor.....	198	1,823	240 28	
Volusia.....	10	100	50 00	
Wakulla.....	268	5,082	362 00	
Walton.....	746	19,740	2,346 00	
Washington.....	55	550	55 00	
Totals.....	10,659	291,946	\$28,249 35	

\*No report.

## No. 8. Value of Total Products of Counties.

COUNTIES.	Annual Products.	Live Stock, Poultry, Etc.	Total.
Alachua .....	\$948,136 55	\$523,873 00	\$1,471,909 55
Baker .....	69,082 05	44,568 00	113,650 05
Bradford .....	433,292 75	232,491 00	665,783 75
Brevard .....	543,091 55	69,495 00	612,586 55
Calhoun .....	57,390 55	62,695 00	120,085 55
Citrus .....	292,507 55	101,955 00	394,462 55
Clay .....	116,338 22	122,723 00	239,061 22
Columbia .....	535,716 98	360,198 00	895,914 98
Dade .....	417,319 00	5,892 00	423,211 00
DeSoto .....	142,340 44	221,121 00	363,461 44
Duval .....	484,255 54	181,603 00	665,858 54
Escambia .....	139,113 25	177,467 00	316,580 25
Franklin .....	16,351 25	18,091 00	34,442 25
Gadsden .....	461,259 50	133,767 00	595,026 50
Hamilton .....	410,138 00	255,697 00	665,835 00
Hernando .....	94,598 86	66,685 00	161,283 86
Hillsborough .....	245,332 11	215,363 00	460,695 11
Holmes .....	183,671 51	115,312 00	298,983 51
Jackson .....	913,683 00	328,265 20	1,241,948 20
Jefferson .....	792,659 00	246,769 30	1,039,428 30
Lafayette .....	203,381 00	61,646 10	265,027 10
Lake .....	458,192 99	99,805 90	558,098 89
Lee .....	73,479 00	233,231 50	306,710 50
Leon .....	1,124,651 45	597,767 00	1,722,418 45
Levy .....	100,994 35	78,124 50	179,118 85
Liber y .....	40,384 00	33,091 00	73,475 00
*Madison .....			
Manatee .....	52,728 50	43,392 00	96,120 50
Marion .....	599,370 86	205,091 00	804,461 86
Monroe .....	173,260 60		173,260 60
Nassau .....	129,718 16	214,017 00	343,805 16
Orange .....	1,037,139 50	482,235 00	1,519,374 50
Osceola .....	76,518 63	203,968 00	280,486 63
Pasco .....	69,803 00	43,148 18	112,951 00
Polk .....	125,994 00	204,399 00	330,393 00
Putnam .....	821,337 00	181,238 00	1,002,675 00
St Johns .....	75,314 00	64,339 00	140,153 00
Santa Rosa .....	66,211 00	111,174 00	177,385 00
Sumter .....	301,632 49	135,172 10	436,804 59
Suwannee .....	320,002 00	177,622 00	497,624 00
Taylor .....	93,345 26	106,894 00	200,239 26
Volusia .....	578,503 00	198,239 00	776,742 00
Wakulla .....	103,655 00	79,178 00	182,833 00
Walton .....	188,985 50	130,165 00	319,150 50
Washington .....	142,428 00	112,321 00	254,749 00
Total .....	\$14,253,415 95	\$7,281,748 19	\$21,535,164 14

\*No report.



TABLE NO. 9.—TOTAL ACREAGE.

Field Crops.....	699,950
Vegetable and Garden Products.....	13,459
	<u>713,409</u>

TABLE NO. 10.—TOTAL VALUE OF ALL PRODUCTS.

Table No. 1.—Field Crops... ..	\$5,948,644 70
Table No. 2.—Vegetable and Garden Products.....	962,823 87
Table No. 3.—Fruit Crops.....	4,862,355 24
Table No. 4.—Live Stock.....	6,130,444 00
Table No. 5.—Poultry .....	669,763 00
Table No. 6.—Dairy Products.....	1,667,697 00
Table No. 7.—Miscellaneous Products.....	353,436 33
Total.....	<u>\$21,535,164 14</u>

TABLE No. 11.

## COMPARATIVE VALUATIONS—SIXTEEN PRINCIPAL PRODUCTS.

1889.			1890.			1891.		
1	Cotton.....	\$2,915,416 12	1	Oranges.....	\$3,862 575 74	1	Oranges.....	\$3,838,517 64
2	Oranges.....	2,691,464 19	2	Cotton.....	2,409,248 61	2	Corn.....	2,438,111 95
3	Corn.....	2,250,418 31	3	Corn.....	2,404,358 60	3	Cotton.....	1,851,726 77
4	Sweet Potatoes.....	736,375 65	4	Sweet Potatoes.....	628,709 65	4	Sweet Potatoes.....	811,061 32
5	Sugar Cane.....	656,789 11	5	Sugar Cane.....	625,821 11	5	Pineapples.....	612,780 92
6	Peanuts.....	595,667 45	6	Peanuts.....	353,954 90	6	Sugar Cane.....	589,876 67
7	Oats.....	340,778 66	7	Cabbages.....	341,105 95	7	Peanuts.....	458,407 45
8	Tomatoes.....	317,447 98	8	Tomatoes.....	301,085 64	8	Tomatoes.....	325,226 20
9	Cabbages.....	246,002 97	9	Oats.....	254,779 00	9	Oats.....	321,537 94
10	Field Peas.....	181,005 05	10	Pineapples.....	147,703 80	10	Cabbages.....	210,319 60
11	Pineapples.....	117,197 10	11	Hay.....	138,182 30	11	Field Peas.....	164,134 15
12	Strawberries.....	96,009 89	12	Field Peas.....	116,257 80	12	Strawberries.....	163,112 20
13	Watermelons.....	95,950 30	13	Watermelons.....	105,409 05	13	Tobacco.....	146,129 65
14	Hay.....	77,785 25	14	Beans.....	92,264 56	14	Watermelons.....	136,569 00
15	Beans.....	73,805 48	15	Strawberries.....	52,413 20	15	Hay.....	120,831 75
16	Tobacco.....	58,383 55	16	Tobacco.....	39,880 50	16	Beans.....	112,822 50

TABLE No. 12.

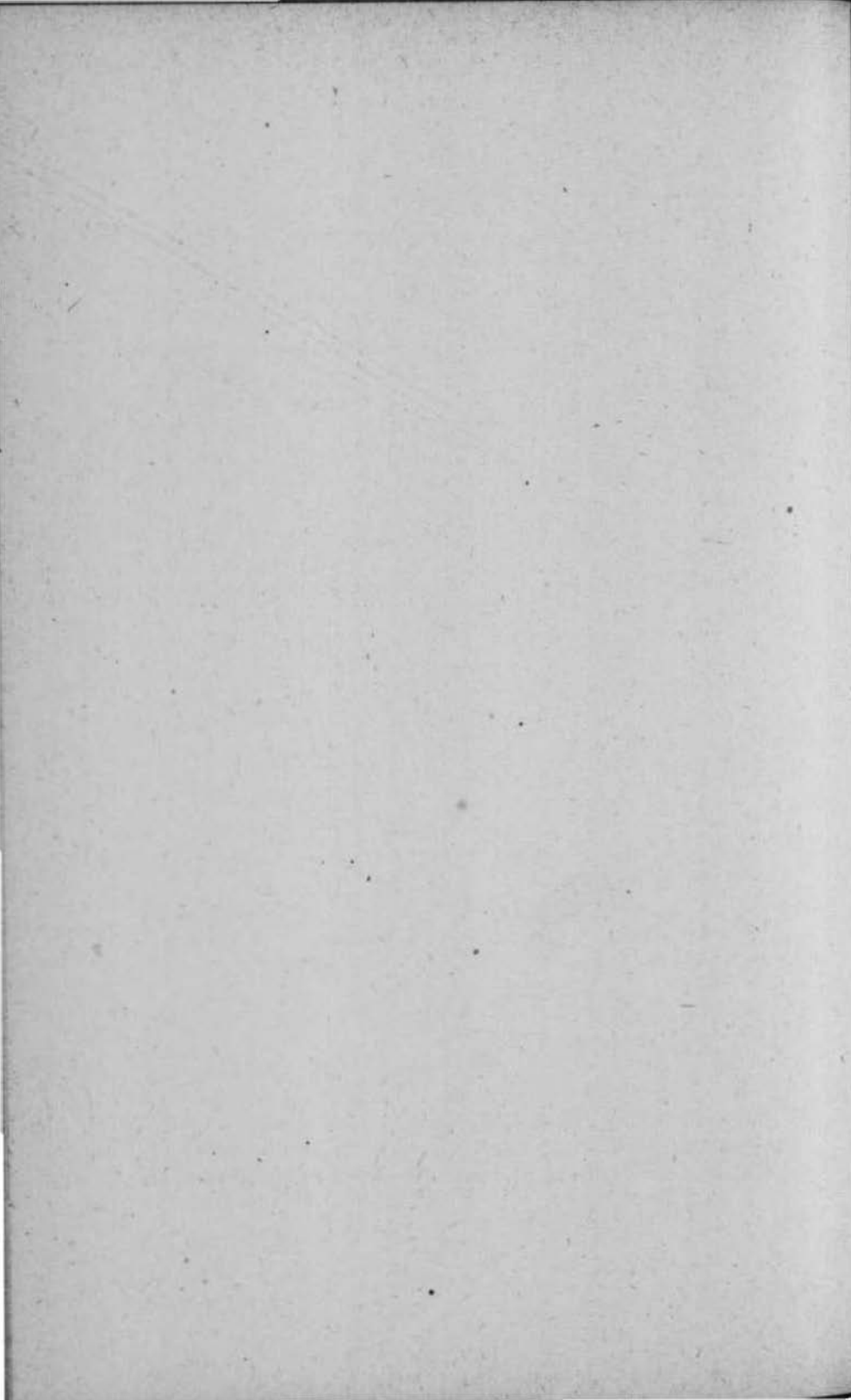
PRINCIPAL ARTICLES OF FLORIDA PRODUCTION, EXPORTED FROM  
FLORIDA DURING THE YEAR 1891.

ARTICLES.	PACKAGES.	QUANTITIES.	EXPORT VALUATION.
Lumber .....	Superficial Feet .....	275,813.047	\$3,751,332 17
Sawn Timber .....	Superficial Feet .....	267,935.672	3,349,195 89
Hewn Timber .....	Cubic feet .....	614,980.500	83,543 00
Shingles .....	Bundles .....	1,070,175	749,070 00
Cross Ties .....	Number .....	625,650	187,995 00
Naval Stores .....	Turpentine and Rosin, brls	9,950	49,760 00
Oak .....	Cubic Feet .....	5,728	716 00
Cedar .....	Cases .....	978	4,690 00
Cedar .....	Cubic Feet .....	3,946	1,325 00
Cypress Lumber .....	Superficial Feet .....	147,264	3,313 44
Sponges .....	Pounds .....	1,184,230	1,776,800 00
Phosphate .....	Tons .....	175,212	1,752,120 00
Leaf Tobacco .....	Pounds .....	1,944,236	2,286,666 00
Manufactured Tobacco .....	Cigars in Cases .....	177,850,000	8,892,500 00
Cotton (Upland) .....	Bales .....	36,778	1,213,570 52
Cotton (Sea Island) .....	Bags .....	13,647	638,156 25
Sugar .....	Pounds .....	1,300,260	39,007 50
Syrup .....	Barrels .....	4,137	49,644 00
Sweet Potatoes .....	Bushels .....	847	636 00
Field Peas .....	Bushels .....	2,107	3,160 00
Pea Nuts .....	Bushels .....	1,847	1,826 00
Rice .....	Tierces .....	1,247	5,611 50
Cattle .....	Number .....	23,859	190,872 00
Hides .....	Pounds .....	707,572	42,454 32
Wool .....	Pounds .....	257,635	58,735 98
Honey .....	Pounds .....	291,946	28,249 35
Beeswax .....	Pounds .....	56,249	11,249 80
Moss .....	Bales .....	45,756	411,804 00
Oranges .....	Boxes .....	3,727,304	4,659,130 00
Lemons .....	Boxes .....	31,275	46,412 50
Limes .....	Boxes .....	8,437	16,874 00
Pineapples .....	Number .....	8,240,180	612,780 92
Bananas .....	Bunches .....	40,280	20,140 00
Cocoanuts .....	Number .....	35,890	3,589 00
Strawberries .....	Crates .....	1,054,717	183,112 20
Pears .....	Barrels .....	25,366	58,253 75
Peaches .....	Bushels .....	74,725	83,464 54
Watermelons .....	Car Loads .....	1,895	36,569 00
Irish Potatoes .....	Barrel .....	15,108	62,149 12
Grapes .....	Pounds .....	27,246	817 38
Wine .....	Gallons .....	15,641	23,481 00
Cabbages .....	Barrels .....	219,388	210,319 60
Squashes .....	Barrels .....	13,270	20,533 00
Egg Plants .....	Barrels .....	5,168	15,983 00
Tomatoes .....	Crates .....	421,746	325,226 20
Cucumbers .....	Crates .....	56,339	63,758 75
English Peas .....	Crates .....	5,576	6,930 00
Beets .....	Crates .....	10,865	8,532 70
Beans .....	Crates .....	80,616	112,822 50
Fish .....	Pounds .....	18,647,898	559,436 94
Oysters .....	Bushels .....	804,920	241,476 00
Total .....			\$32,946,556 82

TABLE No. 13.

SOME OF THE PRINCIPAL ARTICLES OF EXPORT FROM FLORIDA  
FOR THE YEAR 1892.

ARTICLES.	PACKAGE.	QUANTITY.	EXPORT VALUE
Lumber .....	Superficial Ft	286,075,866	3 575,948 32
Sawn Timber .....	"	280,281,691	3,503,521 14
Hewn Timber .....	Cubic Feet...	42,908,648	53,635 10
Shingles .....	Bundles .....	1,781,770	801,796 50
Crossties .....	Number .....	661,238	198,371 40
Naval Stores....	(Turpentine		
	Rosin) Barrels	17,168	85,840 00
Oak .....	Cubic Feet...	7,732	881 00
Cedar .....	Cases .....	1,467	7,335 00
Cedar .....	Cubic Feet...	17,820	4,447 55
Phosphate .....	Tons .....	284,871	2,848,710 00
Tobacco .....	Bales .....	18,847	1,130,820 00
Total export valuation.....			\$12,211,306 01





## STATE PRISON.

---

The convicts sentenced by the various courts of the State to the State Prison for the past two years have been in the custody of Hon. E. B. Bailey, whose lease was extended, December, 1890, for the years 1892 and 1893, he to pay at the rate of \$22.50 per annum for each convict. From this source the State receives something over \$10,000 per annum for the convicts.

Mr. Bailey treats the convicts humanely, gives them good and wholesome food, all the medical attention necessary, and allows them to receive spiritual instruction from the chaplain. Mr. Bailey has sublet some of his convicts as follows: Some to the Messrs. Cranford & Co., who have their men at work near Watertown in Columbia county, in the manufacture of naval stores. Some are leased to Mr. Herlong in the southern part of Columbia county, and they are at work in the mills of Mr. Herlong. Some are leased to Mr. J. K. Young near Luraville, Suwannee county, Florida, these convicts are engaged in the manufacture of naval stores.

Mr. Bailey works those directly under him in the mining of phosphate and on the farm near his mines. Mr. Bailey's present lease will expire on January 1, 1894.

It would be much better for contractors, and therefore enhance the value of convict labor, if no person should be sent to the state prison for a shorter period than one year.

Three or six months in the state prison is no punishment, and you will now find convicts there serving from the second to the fourth or more terms.

The law in relation to pardons or rather commutations should be amended so as to allow a long term, or a life term convict an opportunity to secure a release after a term of years of exceptionally good conduct, without having to furnish copy of indictment, statement of facts testified to at the

trial, etc., before the Pardoning Board can even consider his case.

The male convicts under sixteen years of age and none of the female convicts should be confined with, or near the able-bodied male convicts.

Some of the boys could be reformed and these as well as the women could be employed at a profit to the State in various menial positions at the Insane asylum.

The following tables, with appended reports as to health of convicts, show the transactions in this department for the years 1893 and 1892:

TABLE No. 1.

Convicts on hand January 1, 1891.....	409
committed during year.....	267
recaptured during year.....	7
Total to be accounted for .....	683
Convicts discharged by expiration of sentence....	177
discharged on bond for new trial.....	1
died during year.....	13
escaped during year.....	27
No. 1526 escaped during year 1890 and omitted from that report.....	1
pardoned during the year.....	11
remaining on hand December 31, 1891....	453—683

TABLE No. 2.

SHOWING NATIVITY, SEX AND COLOR OF CONVICTS COMMITTED  
DURING THE YEAR 1891:

Florida.....	120	New York.....	1
Georgia.....	35	New Jersey.....	2
Mississippi.....	4	Kentucky.....	3
Maryland.....	2	Louisiana.....	3
California.....	1	Cuba.....	2
Virginia.....	8	England.....	3
South Carolina.....	16	Bermuda.....	1
Tennessee.....	4	Not given.....	14
Texas.....	2		
Connecticut.....	1	Total.....	267
West Virginia.....	1	Foreign born.....	9
Pennsylvania.....	1	White males.....	49
Ohio.....	1	Colored males.....	205
Missouri.....	1	Color not given.....	13
Ireland.....	1	Natives.....	258
Nassau, N. P.....	1	White females.....	00
Prussia.....	1	Colored females.....	00
North Carolina.....	17		
Alabama.....	21	Total.....	267

TABLE No. 3.

CRIME FOR WHICH SENTENCED DURING YEAR 1891.

Murder.....	15	Burglary.....	3
Adultery.....	1	Crime against nature.....	2
Assault to rape.....	5	Rape.....	1
Resisting officer.....	3	Carnal knowledge of fe-	
Breaking and entering..	94	male child.....	2
Larceny.....	56	Changing mark.....	1
Gambling.....	2	Fraudulently marking an-	
Forgery.....	8	imal.....	1
Robbery.....	3	Procuring female for car-	
Assault to murder.....	25	nal purpose.....	1
Perjury.....	1	Horse stealing.....	1
Attempt to commit burg-		Wilfully killing unborn	
lary.....	1	child.....	1
Bestiality.....	1	Attempt to burn.....	1
Arson.....	4	Not given.....	30
False pretense.....	3		
Assault and robbery.....	1	Total.....	267

TABLE NO. 4.

TERM OF IMPRISONMENT OF CONVICTS COMMITTED DURING  
YEAR 1891.

2 months.....	1	2 years.....	45
3 months.....	9	2½ years.....	3
4 months.....	2	3 years.....	24
5 months.....	1	3½ years.....	1
6 months.....	34	4 years.....	8
8 months.....	5	5 years.....	18
9 months.....	5	7 years.....	7
10 months.....	1	8 years.....	2
1 year.....	81	10 years.....	6
1½ years.....	3	15 years.....	1
2 years.....	45	20 years.....	2
Life.....	8		
			Total.....267

TABLE NO. 5.

## AGE OF PRISONERS COMMITTED DURING YEAR 1891.

10 years old . . . . .	1	37 years old . . . . .	2
12 " . . . . .	3	38 " . . . . .	4
14 " . . . . .	5	40 " . . . . .	3
15 " . . . . .	4	42 " . . . . .	1
16 " . . . . .	7	43 " . . . . .	2
17 " . . . . .	5	44 " . . . . .	1
18 " . . . . .	10	45 " . . . . .	1
19 " . . . . .	15	46 " . . . . .	3
20 " . . . . .	16	47 " . . . . .	2
21 " . . . . .	23	48 " . . . . .	4
22 " . . . . .	19	49 " . . . . .	1
23 " . . . . .	13	50 " . . . . .	2
24 " . . . . .	17	51 " . . . . .	1
25 " . . . . .	15	54 " . . . . .	2
26 " . . . . .	16	55 " . . . . .	2
27 " . . . . .	8	56 " . . . . .	2
28 " . . . . .	9	60 " . . . . .	1
29 " . . . . .	6	62 " . . . . .	1
30 " . . . . .	6	69 " . . . . .	1
31 " . . . . .	3	73 " . . . . .	1
32 " . . . . .	4	74 " . . . . .	1
33 " . . . . .	2	Age not given . . . . .	12
34 " . . . . .	4		
35 " . . . . .	4	Total . . . . .	267
36 " . . . . .	2		

TABLE No. 6.  
 PARDONED IN YEAR 1891.

NAME.	COLOR.	CRIME.	TERM.	SENTENCED.		PARDONED.
				When.	Where.	
Frank Vicchi .....	White.....	Crime against nature..	6 years.....	July 9, 1889.....	Escambia Co....	January 26, 1891.
Henry Frazier .....	Black.....	Assault to murder.....	2 years.....	August 16, 1890.....	Hamilton Co....	May 9, 1891.
Wash Hines.....	Yellow.....	Murder.....	7 years.....	October 19, 1889.....	Madison Co....	May 7, 1891.
Eddie Smith, alias Cox.....	Yellow.....	Murder.....	Life.....	August 4, 1884.....	Leon Co.....	August 1, 1891.
Ephraim Williams.....	White.....	Not given.....	2 years.....	November 13, 1890.....	Jefferson Co....	August 3, 1891.
John Thomas.....	Yellow.....	Murder.....	Life.....	March 19, 1887.....	Sumter Co.....	August 3, 1891.
Jasper Lake.....	Brown.....	Assault to murder.....	5 years.....	October 30, 1889.....	Hamilton Co....	August 3, 1891.
John B. Norton.....	White.....	Forgery.....	6 years.....	March 22, 1889.....	Orange Co.....	August 5, 1891.
Frank A. Lowery.....	White.....	Murder.....	Life.....	March 9, 1886.....	Orange Co.....	August 5, 1891.
Franklin Jeter.....	White.....	Crime against nature..	6 months.....	December 1, 1891.....	Jackson Co....	December 18, 1891.
James Alexander.....	Yellow.....	Assault to murder.....	3 years.....	October 22, 1891.....	Polk.....	December 17, 1891.



TABLE NO. 7.  
ESCAPED DURING YEAR 1891.

NAME.	COLOR.	CRIME.	TERM.	SENTENCE.		ESCAPED.
				When.	Where.	
Joshua Mann	Brown	Maliciously killing mule	5 years	April 24, 1890	Leon Co.	January 15, 1891.
Edward Frazier	Brown	Kidnap	Life	November 18, 1887	Putnam Co.	January 15, 1891.
Jesse Harrison	Black	Being a thief	4 years	October 30, 1888	Orange Co.	February 18, 1891.
Peter Snowden	White	Larceny domestic animal	1 year	October 25, 1890	Nassau Co.	February 18, 1891.
Soney Thompson	Black	Larceny	1 year	October 31, 1890	Walton Co.	June 5, 1891.
Frank Clark	White	Larceny	3 years	December 30, 1890	Duval Co.	May 20, 1891.
Madison M. Conner	White	Larceny	2 years	February 9, 1891	Alachua Co.	May 20, 1891.
S. E. Hill, alias Jack Glaso	White	Forgery	1 year	October 16, 1890	Baker Co.	July 21, 1891.
Ford Perkins	White	Breaking and entry	10 years	June 12, 1890	Lake Co.	July 28, 1891.
John Carroll	Brown	Burglar	3 years	April 20, 1891	Marion Co.	July 2, 1891.
Allen Smith	Brown	Breaking and entry	16 years	October 31, 1890	Walton Co.	June 5, 1891.
Amos Sams	Black	Not given	2 years	September 18, 1890	St. Johns Co.	June 4, 1891.
John Bond	Black	Entering building	2 years	June 23, 1891	Putnam Co.	December 22, 1891.
P. C. Kellogg	Not given	Forgery	2 years	June 28, 1891	Duval Co.	August 6, 1891.
James Ota	Yellow	Breaking and entering to commit grand larceny	Life	December 20, 1881	Escambia Co.	August 6, 1891.
Washington McRay	Brown	Beastiality	6 years	October 31, 1891	Madison Co.	December 14, 1891.
Charles Gardner	Black	Larceny	4 years	August 6, 1890	Suwannee Co.	July 2, 1891.
Charles R. Cook	Light	Murder	Life	December 12, 1887	Volusia Co.	May 20, 1891.
Benjamin Caswell	Black	Larceny	1 year	November 21, 1891	Duval Co.	December 14, 1891.
Charles Mickler	Brown	Assault to murder	6 years	December 24, 1886	Duval Co.	March 7, 1891.
Alfred Small	Black	Rape	5 years	December 2, 1887	Duval Co.	July 13, 1891.
William Jones	Black	Breaking and entry	5 years	January 7, 1888	Leon Co.	July 21, 1891.
Thomas Calvis	Black	Breaking and entry	5 years	July 11, 1889	Orange Co.	March 21, 1891.
Sam Castleberry	Black	Breaking and entry	5 years	March 24, 1891	Escambia Co.	November 11, 1891.
Milton Asa	Brown	Breaking and entry	1 year	October 30, 1891	Putnam Co.	December 15, 1891.
George Simmons	Black	Breaking and entry	5 years	November 18, 1891	Duval Co.	December 28, 1891.
Johnnie Patterson	Black	Assault to murder	2 years	November 20, 1891	Duval Co.	December 28, 1891.

TABLE NO. 8.  
DIED DURING THE YEAR 1891.

NAME.	COLOR.	CRIME.	TERM.	SENTENCED.		DIED.	DISEASE.
				When.	Where.		
Edward Shaers.....	Brown...	Murder.....	Life.....	April 9, 1886.....	Hillsborough Co.	June 5, 1891.....	Not given.
Benjamin Lancaster.....	White....	Breaking and entry.....	6 years.....	April 14, 1886.....	Baker Co.....	January 2, 1891.....	Not given.
William Johnson.....	Black....	Attempt to murder.....	7 years.....	April 12, 1886.....	Gadsden Co.....	July 15, 1891.....	Not given.
John Whidden.....	White....	Murder.....	Life.....	March 15, 1889.....	Sumter Co.....	November 11, 1891.....	Not given.
Charles Richardson.....	Brown....	Breaking and entry.....	6 years.....	March 20, 1889.....	Alachua Co.....	May 29, 1891.....	Not given.
Mack Gerald.....	Yellow....	Murder.....	Life.....	June 22, 1889.....	Duval Co.....	July 6, 1891.....	Not given.
James Owens.....	Black....	Burglary.....	15 years.....	November 7, 1888.....	Suwannee Co.....	April 14, 1891.....	Not given.
James Justice.....	White....	Murder.....	Life.....	June 5, 1890.....	Jackson Co.....	March 10, 1891.....	Not given.
Henry Jackson.....	Black....	Breaking and entry.....	15 years.....	August 6, 1890.....	Suwannee Co.....	June 22, 1891.....	Not given.
Jesse Spear.....	Black....	Larceny.....	3 years.....	October 30, 1890.....	Duval Co.....	November 10, 1891.....	Not given.
Le B. Sparkman.....	White....	Arson.....	8 years.....	March 5, 1891.....	Putnam Co.....	September 20, 1891.....	Killed by mine caving in.
William Campbell.....	Copper....	Assault to rape.....	3 years.....	April 10, 1891.....	Hillsborough Co.	May, 1891.....	Not given.
Mack McRae.....	Yellow....	Murder.....	Life.....	April 13, 1891.....	Hillsborough Co.	July 20, 1891.....	Not given.

TABLE No. 9.

Convicts on hand January 1, 1892 . . . . .	453	
" committed during the year . . . . .	288	
" recaptured during the year . . . . .	6	
Total to be accounted for . . . . .		747
Discharged by expiration of sentence . . . . .	214	
" by order of Supreme Court . . . . .	1	
" for new trial . . . . .	3	
" by order Board of Pardons . . . . .	12	
" on bond for new trial . . . . .	3	
Died during year . . . . .	21	
Escaped during year . . . . .	14	
On hand January 1, 1893 . . . . .	482	747

TABLE No. 10.

NATIVITY, SEX AND COLOR OF CONVICTS COMMITTED DURING  
YEAR 1892.

Florida . . . . .	137	Texas . . . . .	1
Tennessee . . . . .	6	Ohio . . . . .	1
Georgia . . . . .	62	Spain . . . . .	1
South Carolina . . . . .	18	West Indies . . . . .	2
North Carolina . . . . .	20	England . . . . .	1
Indiana . . . . .	1	Not given . . . . .	4
Kentucky . . . . .	2		
Alabama . . . . .	17	Total . . . . .	288
Louisiana . . . . .	2	White males . . . . .	40
Virginia . . . . .	5	Colored males . . . . .	244
Pennsylvania . . . . .	1	Colored females . . . . .	4
Arkansas . . . . .	2		
California . . . . .	1		288
Connecticut . . . . .	1	Natives . . . . .	284
Rhode Island . . . . .	1	Foreign born . . . . .	4
New York . . . . .	1		
Massachusetts . . . . .	1	Total . . . . .	288

TABLE No. 11.

## CRIMES FOR WHICH COMMITTED DURING YEAR 1892.

Murder . . . . .	23	Receiving stolen goods . . . . .	1
Breaking and entering . . . . .	86	Burning bridge . . . . .	1
Larceny . . . . .	80	Notorious thief . . . . .	3
Having burglars' tools on person . . . . .	1	Entering building . . . . .	1
Forgery . . . . .	11	False pretense . . . . .	3
Assault to rob . . . . .	3	Enticing away female for marriage . . . . .	1
Robbery . . . . .	5	Polygamy . . . . .	2
Assault to murder . . . . .	28	Changing mark . . . . .	3
Gambling . . . . .	2	Horse stealing . . . . .	1
Manslaughter . . . . .	3	Burglary . . . . .	2
Beastiality . . . . .	4	Crime against nature . . . . .	1
Perjury . . . . .	3	Counterfeiting coin . . . . .	2
Having carnal intercourse with female child . . . . .	3	Obstructing R. R. track . . . . .	1
Assault to rape . . . . .	4	Incest . . . . .	1
Rape . . . . .	5	Crime not given . . . . .	2
Adultery . . . . .	1		
Shooting at car . . . . .	1	Total . . . . .	288

TABLE No. 12.

## TERMS OF SENTENCE OF CONVICTS COMMITTED DURING 1892.

1 month . . . . .	1	3 years . . . . .	20
3 months . . . . .	9	4 " . . . . .	7
4 " . . . . .	3	5 " . . . . .	27
6 " . . . . .	39	6 " . . . . .	1
7 " . . . . .	1	7 " . . . . .	2
8 " . . . . .	2	8 " . . . . .	1
9 " . . . . .	4	10 " . . . . .	7
10 " . . . . .	1	15 " . . . . .	2
15 " . . . . .	1	20 " . . . . .	2
1 year . . . . .	74	Life . . . . .	27
1½ years . . . . .	8		
2 " . . . . .	47	Total . . . . .	288
2½ " . . . . .	2		

TABLE NO. 13.

## AGE OF CONVICTS COMMITTED DURING YEAR 1892.

12 years old	.	.	.	2	36 years old	.	.	.	2
13 "	.	.	.	3	37 "	.	.	.	4
14 "	.	.	.	2	38 "	.	.	.	5
15 "	.	.	.	8	39 "	.	.	.	6
16 "	.	.	.	10	40 "	.	.	.	4
17 "	.	.	.	9	41 "	.	.	.	2
18 "	.	.	.	17	42 "	.	.	.	3
19 "	.	.	.	23	43 "	.	.	.	3
20 "	.	.	.	16	44 "	.	.	.	1
21 "	.	.	.	26	45 "	.	.	.	1
22 "	.	.	.	19	46 "	.	.	.	3
23 "	.	.	.	20	47 "	.	.	.	2
24 "	.	.	.	15	48 "	.	.	.	1
25 "	.	.	.	13	49 "	.	.	.	1
26 "	.	.	.	15	50 "	.	.	.	1
27 "	.	.	.	12	51 "	.	.	.	1
28 "	.	.	.	5	52 "	.	.	.	1
29 "	.	.	.	3	53 "	.	.	.	1
30 "	.	.	.	6	54 "	.	.	.	1
31 "	.	.	.	4	55 "	.	.	.	1
32 "	.	.	.	4	56 "	.	.	.	1
33 "	.	.	.	6	57 "	.	.	.	1
34 "	.	.	.	2	58 "	.	.	.	1
35 "	.	.	.	3	59 "	.	.	.	1
					60 "	.	.	.	1
					61 "	.	.	.	1
					62 "	.	.	.	1
					63 "	.	.	.	1
					64 "	.	.	.	1
					65 "	.	.	.	1
					66 "	.	.	.	1
					67 "	.	.	.	1
					68 "	.	.	.	1
					69 "	.	.	.	1
					70 "	.	.	.	1
					71 "	.	.	.	1
					72 "	.	.	.	1
					73 "	.	.	.	1
					74 "	.	.	.	1
					75 "	.	.	.	1
					76 "	.	.	.	1
					77 "	.	.	.	1
					78 "	.	.	.	1
					79 "	.	.	.	1
					80 "	.	.	.	1
					81 "	.	.	.	1
					82 "	.	.	.	1
					83 "	.	.	.	1
					84 "	.	.	.	1
					85 "	.	.	.	1
					86 "	.	.	.	1
					87 "	.	.	.	1
					88 "	.	.	.	1
					89 "	.	.	.	1
					90 "	.	.	.	1
					91 "	.	.	.	1
					92 "	.	.	.	1
					93 "	.	.	.	1
					94 "	.	.	.	1
					95 "	.	.	.	1
					96 "	.	.	.	1
					97 "	.	.	.	1
					98 "	.	.	.	1
					99 "	.	.	.	1
					100 "	.	.	.	1
					Total	,	.	.	288



TABLE No. 14.  
 PARDONED IN THE YEAR 1892.

NAME.	COLOR.	CRIME.	TERM.	SENTENCED.		PARDONED.	REMARKS.
				When	Where.		
Robert Moore.....	Black..	Assault to murder.....	2 years	October 3, 1890.	Volusia County....	July 30, 1892.....	
Charles Richardson....	Black..	Assault to rape.....	30 years	July 9, 1888.....	Escambia ".....	April 11, 1892.....	
Tony S. Owens.....	Black..	False swearing.....	10 years	February 14, 1890	Suwannee ".....	May 4, 1892.....	
E. D. Hewett.....	White..	Assault to rape.....	2 years	November 7, 1891	Holmes ".....	May 29, 1892.....	
Joseph C. Anderson....	White..	Murder.....	Life.....	June 13, 1886....	Manatee ".....	July 1, 1892.....	
Louis L. Cato.....	White..	Murder.....	Life.....	June 7, 1886....	Manatee ".....	July 1, 1892.....	
Charles B. Willard...	White..	Murder.....	Life.....	June 13, 1886....	Manatee ".....	July 1, 1892.....	
Frank Manning.....	Black..	Assault to rape and rob	Life.....	November 5, 1881	Suwannee ".....	July 1, 1892.....	
Smart Sloan.....	Black..	Rape.....	Life.....	October 22, 1887.	Nassau ".....	July 1, 1892.....	
Ivey Byrd.....	White..	Larceny.....	1 year.	November 14, 1891	Osceola ".....	August 15, 1892....	
John Savage.....	White..	Larceny.....	1 year.	November 14, 1891	Osceola ".....	August 15, 1892....	
Gus Crosby.....	Black..	Bestiality.....	3 years	April 8, 1892.....	Santa Rosa ".....	December 31, 1892..	

TABLE No 15.  
DIED DURING YEAR 1892.

NAME.	COLOR.	CRIME.	TERM.	SENTENCED.		DIED.	DISEASE.
				When.	Where.		
Wiley Durden .....	White....	Murder .....	Life .....	July 12, 1881.....	Franklin Co.....	July 31, 1892.....	Old age.
John Garlington.....	Black .....	Murder .....	Life .....	April 20, 1889.....	Putnam Co.....	March 26, 1892.....	Pneumonia.
Elbert Whit eld.....	White....	Arson.....	7 years.....	November 15, 1888..	Orange Co.....	May 14, 1892.....	Typhoid fever.
John Boggs .....	Yellow....	Assault to rape .....	25 years.....	July 5, 1889.....	Lake Co.....	May 8, 1892.....	Pneumonia.
Jack A kinson.....	Black .....	Mahciously killing mule	5 years.....	January 25, 1890.....	Leon Co.....	April 7, 1892.....	Pneumonia.
Peter Williams.....	Black .....	Murder.....	Life.....	Janu ry 6, 1890.....	Duval Co .....	July 2, 1892.....	Dropsy.
William Cooley.....	Brown .....	Assault to murder.....	2 years.....	April 10, 1891.....	Hillsborough Co..	March 2, 1892.....	Syphilis.
Henderson Roberts .....	Black .....	Larceny.....	3 years.....	April 30, 1891.....	Duval Co.....	January 29, 1892....	Intermit'nt f ver.
J. T. Shavers.....	White....	Forgery.....	2 years.....	July 14, 1891.....	Escambia Co.....	May 26, 1892.....	Killed by gua d while trying to escape.
John Wright.....	Brown .....	Breaking and entry .....	1 year.....	August 14, 1891.....	Volusia Co.....	June 2, 1892.....	Lockjaw.
Dave Sumerall.....	Black .....	Assault to murder.....	3 years.....	October 29, 1892.....	Nassau Co.....	June 28, 1892.....	Pneumonia.
Lewis Gay.....	Black .....	Breaking and entry .....	10 years.....	Nov e ber 19, 1891..	Washington Co..	July 8, 1892.....	Pneumonia.
John Council .....	Black .....	Larceny.....	8 months.....	November 20, 1891..	Duval Co.....	May 5, 1892.....	Pneumoni Killed by falling tree.
Henry Warren.....	Black .....	Arson.....	10 years.....	December 4, 1891.....	Jackson Co.....	October 10, 1892....	Pneumonia.
H. J. Woodsworth.....	White....	Burglary.....	2 years.....	January 13, 1892.....	Orange Co.....	March 11, 1892.....	Pneumonia.
Allen Crosby.....	Black .....	Beastiality .....	3 years.....	April 8, 1892.....	Santa Rosa Co..	October 18, 1892 ..	Pneumonia.
James Hickey.....	White....	Larceny.....	8 months.....	May 24, 1892.....	Hillsborough Co..	July 31, 1892.....	Pneumonia.
Aaron Johnson.....	Black .....	Larceny.....	6 months.....	June 15, 1892.....	Marion Co .....	October 30, 1892 ..	Pneumonia.
Tony Clemens.....	Black .....	Murder .....	Life.....	April 26, 1892.....	Levy Co.....	October 26, 1892....	Bright's disease. Compression of brain.
Warren Greenleaf.....	Brown.....	Assault to murder.....	5 years.....	May 1, 1891.....	Duval Co.....	December 18, 1892..	Pneumonia.
Edmond Pittman.....	Brown.....	Breaking and entry.....	1 year.....	November 29, 1892..	Jackson Co.....	December 30, 1892..	Pneumonia.

TABLE NO. 16.  
ESCAPED DURING YEAR 1892.

NAME.	COLOR.	CRIME.	TERM.	SENTENCED.		ESCAPED.
				When.	Where.	
John Brown.....	Black...	Breaking and entering	21 years..	October 22, 1887..	Marion County.....	February 2, 1892.
James Coleman.....	Black....	Murder.....	Life.....	June 10, 1889....	Polk.....	February 2, 1892.
Lloyd Williams.....	Brown....	Murder.....	Life.....	December 17, 1888	Alachua.....	January 24, 1892.
Jack Scott.....	Black....	Murder.....	Life.....	June 10, 1882....	Alachua.....	January 24, 1892.
H. Brown.....	Yellow...	Assault to murder.	2 years..	February 13, 1892.	Brevard.....	July 18, 1892.
Henry Hall.....	Black....	Breaking and entering.	8 months..	December 15, 1891	Alachua.....	June 24, 1892.
Thomas Anderson.....	White....	Breaking and entering.	4 years..	January 13, 1892..	Orange.....	April 29, 1892.
Wright Sapp.....	Black....	Breaking and entering.	4 years..	November 19, 1889	Columbia.....	November 15, 1892.
Monro Newborn.....	Black....	Breaking and entering.	2 years..	August 14, 1891..	Volusia.....	November 11, 1892.
Mack McHellen.....	Black....	Assault to murder....	2 years..	August 19, 1892..	Orange.....	September 15, 1892.
Purman Williams.....	Yellow...	Breaking and entering.	6 years..	January 16, 1891..	Leon.....	August 2, 1892.
Thomas Shelton.....	White....	Breaking and entering.	3 years..	January 13, 1892..	Orange.....	October 13, 1892.
Ed Brown.....	Yellow...	Larceny.....	6 years..	April 19, 1892....	Clay.....	December 23, 1892.
John Franklin.....	Brown....	Murder.....	Life.....	June 1, 1888.....	Duval.....	May 2, 1892.

FORT WHITE, Columbia County, Fla., Dec. 31, 1892.

Hon. L. B. Wombwell, Tallahassee, Fla.:

DEAR SIR—The general health of the convict camps for the past two years has been exceptionally good. I should say the dead list numbering 33, contains three accidentally killed, and a large majority of the others were due to diseases contracted prior to their arrival at the State penitentiary, and were absolutely incurable.

Yours truly,

E. B. BAILEY.

MONTICELLO, FLA., January 10, 1893.

Hon. L. B. Wombwell:

DEAR SIR—After some delay, I will try and furnish you a few items of my observations among the convicts.

The majority of them appreciate the coming among them of the chaplain, and are very attentive and orderly under the circumstances.

If there was a place provided to congregate them out of the cell much better results would follow. I found a disposition in many of them to reform and willing to be advised and to read good literature, etc., etc.

From all the information I have gathered it is a benefit to the managers of the prison as well as the men; they all need moral restraint. If the work of the chaplain is wisely directed it contributes largely to the humane treatment of the prisoners and in every way to their better treatment. I distributed many thousand pages of good reading matter with the guards and managers, as well as the men. I learn from Mr. Bailey that there are very few returned convicts which is hopeful of reform, but I wish to express my convictions concerning the State's responsibility with its prisoners. The system of leasing is inhumane; in the nature of things it is wrong for the State to have a system of revenue at the severe expense of these unfortunate creatures. The men hiring of them intend to make money by the operation; whether it makes them better citizens or not is nothing to those that work them. The State is bound in morals and humanity

while it punishes for crime and violation of law, to use reasonable and probable methods to reform and make them better people. If the State is so situated that it is a necessity to hire them out, compel the lessee to provide a chapel in connection with the prison, and the State to assist the chaplain in suitable means of a reformatory nature, etc.

And to increase the possibilities of reforming, the minors, or at least those under sixteen, should be separate from the older criminals; there would then be more hope of reforming them, etc.

I have taken the liberty to bring these items to your notice and hope you will be able to embody in your report something that will better the present state of matters concerning the prisoners.

Yours truly,

D. H. BRYAN.

In the foregoing pages there has been set forth as briefly as the various subjects justify, the work of the Department of Agriculture of Florida. In conclusion, I thank you heartily for the support you have ever accorded me during the four years I have had the honor to serve as Commissioner of Agriculture under your administration.

Very respectfully,

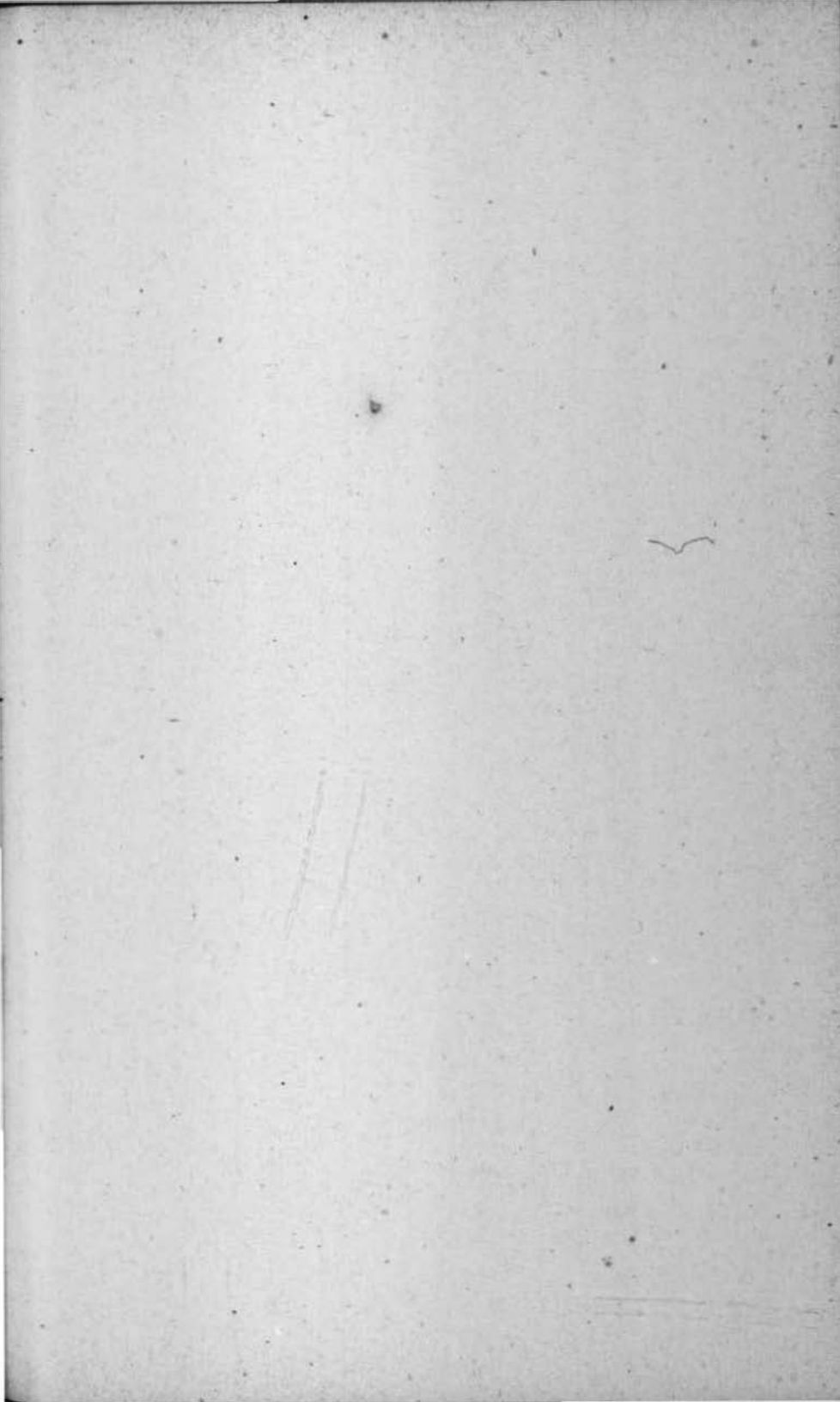
L. B. WOMBWELL,  
Commissioner of Agriculture.

**ERRATA.**

---

Page 28, line 13, the signature " John " Potsdamer should read " Julius " Potsdamer.





FORT WHITE, Columbia County, Fla., Dec. 31, 1892.

Hon. L. B. Wombwell, Tallahassee, Fla.:

DEAR SIR—The general health of the convict camps for the past two years has been exceptionally good. I should say the dead list numbering 33, contains three accidentally killed, and a large majority of the others were due to diseases contracted prior to their arrival at the State penitentiary, and were absolutely incurable.

Yours truly,

E. B. BAILEY.

MONTICELLO, FLA., January 10, 1893.

Hon. L. B. Wombwell:

DEAR SIR—After some delay, I will try and furnish you a few items of my observations among the convicts.

The majority of them appreciate the coming among them of the chaplain, and are very attentive and orderly under the circumstances.

If there was a place provided to congregate them out of the cell much better results would follow. I found a disposition in many of them to reform and willing to be advised and to read good literature, etc., etc.

From all the information I have gathered it is a benefit to the managers of the prison as well as the men; they all need moral restraint. If the work of the chaplain is wisely directed it contributes largely to the humane treatment of the prisoners and in every way to their better treatment. I distributed many thousand pages of good reading matter with the guards and managers, as well as the men. I learn from Mr. Bailey that there are very few returned convicts which is hopeful of reform, but I wish to express my convictions concerning the State's responsibility with its prisoners. The system of leasing is inhumane; in the nature of things it is wrong for the State to have a system of revenue at the severe expense of these unfortunate creatures. The men hiring of them intend to make money by the operation; whether it makes them better citizens or not is nothing to those that work them. The State is bound in morals and humanity

while it punishes for crime and violation of law, to use reasonable and probable methods to reform and make them better people. If the State is so situated that it is a necessity to hire them out, compel the lessee to provide a chapel in connection with the prison, and the State to assist the chaplain in suitable means of a reformatory nature, etc.

And to increase the possibilities of reforming, the minors, or at least those under sixteen, should be separate from the older criminals; there would then be more hope of reforming them, etc.

I have taken the liberty to bring these items to your notice and hope you will be able to embody in your report something that will better the present state of matters concerning the prisoners.

Yours truly,

D. H. BRYAN.

---

In the foregoing pages there has been set forth as briefly as the various subjects justify, the work of the Department of Agriculture of Florida. In conclusion, I thank you heartily for the support you have ever accorded me during the four years I have had the honor to serve as Commissioner of Agriculture under your administration.

Very respectfully,

L. B. WOMBWELL,  
Commissioner of Agriculture.

# **ERRATA.**

Page 28, line 13, the signature "John" Potsdamer should read "Julius" Potsdamer.